Inwood's Tables

for the

Purchasing of Estates, &c.
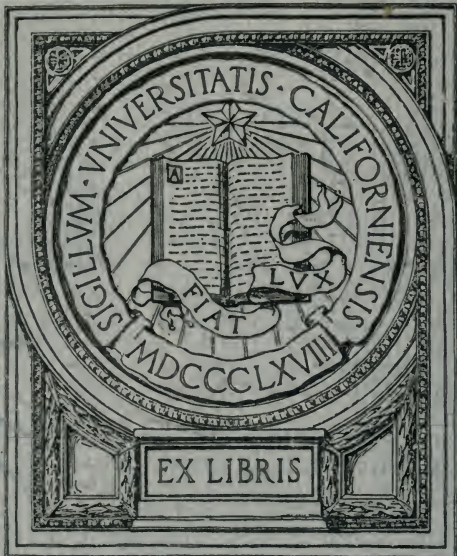

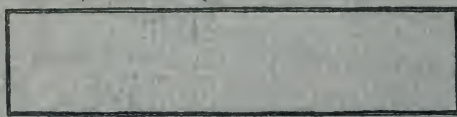## W. Schooling

INWOOD'S TABLES.

OF INTEREST AND MORTALITY

FOR THE PURCHASING OF ESTATES

AND

VALUATION OF PROPERTIES

INCLUDING

|	
ADVOWSONS .	LEASEHOLDS
ASSURANCE POLICIES	LIFE INTERESTS
COPYHOLDS	MORTGAGES
DEFERRED ANNUITIES	PERPETUITIES
FREEHOLDS	RENEWALS OF LEASES
GROUND RENTS	REVERSIONS
IMMEDIATE ANNUITIES	SINKING FUNDS
ETC.	ETC.

Thirtieth Edition, Revised and Extended

BY

WILLIAM SCHOOLING, F.R.A.S.

WITH LOGARITHMS OF NATURAL NUMBERS

AND

THOMAN'S LOGARITHMIC INTEREST AND ANNUITY TABLES
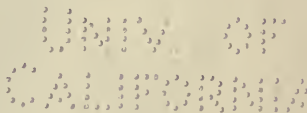
Capio Lumen

NOTE

THE present edition, besides retaining the additions to the preceding issue, has been carefully revised, and in it, thanks to the courtesy of correspondents, a few errors of the press will be found corrected.

Should any user of the book discover a mistake in even a single figure, the Publishers will be greatly obliged by having their attention called to it.

WILLIAM SCHOOLING.

17 OLD QUEEN STREET,
        WESTMINSTER, S.W.

PREFACE

IN response to requests received since the issue of the
Twenty-fifth Edition of this work, Tables I. and XVII. of
the Twenty-fourth and earlier editions are now given here,
in similar form to that in which they there appeared. They
have, however, been extended to many more rates of interest,
and Table XVII. has been extended to longer terms of years
than formerly. The old Table I. will be found in the
present edition on pp. xx to xxxi, and the old Table
XVII. on pp. xxxii to xxxix. The former of these two
Tables, it may be pointed out, appears also for integral years
to a larger number of decimal places in the Tables showing
the present value of £1 per annum (pp. 50 to 85, and 92
and 93). The present value of the reversion of a perpetuity
appears to a larger number of decimal places on pp. 95
to 98.

The values in the Table for purchasing of leases, estates,
or annuities (pp. xx to xxxi) do not agree, so far as half-
years are concerned, with the Twenty-fourth edition. The
method formerly adopted assumed interest to be convertible
momently or continuously. This supposition, however, is
not usually employed, but in practice the value of a lease or
annuity certain, say for 22½ years at 6 per cent. per annum,
would be considered to be equivalent to the value of a lease
or annuity certain for double the term (or 45 years), at half
the rate of interest (or 3 per cent. per annum). This value
would be equal to 12·259, whilst the value given in old editions
of 'Inwood' is 12·174 only, the latter representing the value
of an annuity of 1 for 22½ years, computed at such a rate of
interest convertible momently as would be equivalent to an

actual or effective rate of 6 per cent. per annum. The value assigned in practice of 12·259 is based upon a rate of interest at 3 per cent. per half-year, which is equal to an effective annual rate of 6·09, or £6 1s. 10d. per cent. per annum (see pp. 18 and 122). It will be recognised therefore that in conformity with the usual practice the values now given for integral years assume interest to be convertible *annually*, and the values for the half-years assume it to be convertible *half-yearly*.

In response to a suggestion that the present value of £1 and of £1 per annum at 15 per cent. per annum would be found convenient by mining engineers and others, a table giving these values has been computed, and is given on p. xl.

The method adopted was as follows. The present value of £1 per annum due at the end of 100 years was calculated by the aid of Gray's 24 figure logarithms, true to fifteen places of decimals; multiplying this amount by the rate of interest gives the arithmetical complement of the present value of £1 due at the end of 100 years; adding these two items together and deducting unity gives the amount of £1 per annum at the end of 99 years, and this process was continued to the end of the Table. In multiplying by the rate of interest it was convenient to employ Tate's Arithmometer, by means of which the necessary multiplications and additions were performed with the greatest ease.

The results were checked every ten years, and the number of decimal places was reduced from time to time, the result being brought true to nine places when, at the end of the calculations, the first year was reached.

In the present edition a few errors, which have been discovered since the publication of the last edition, have been corrected.

WILLIAM SCHOOLING.

PREFACE

TWENTY-FIFTH EDITION

In the present edition of this work, many extensive additions have been made, and the book has been entirely reset ; the size of the page has been enlarged, to allow of a more convenient arrangement of the Tables ; the whole of it has been carefully revised ; and the Tables have been placed in logical sequence. The volume now contains 336 pages demy 8vo, as compared with 308 pages crown 8vo in the last edition.

The principal alterations and additions may be briefly recorded. The Interest Tables, which were formerly scattered throughout the book, are now all brought together. The amount and present value of £1 and of £1 per annum at the same rate of interest all appear on the same page, instead of each of these items at varying rates of interest being tabulated separately. For most purposes this is more convenient, but on pp. 86–93 abbreviated Tables appear in the old form.

Throughout the book any Table that occupies two pages is arranged so that the whole of it may be seen at one opening—a detail that adds much to the convenience of using the Table.

The Rates of Interest for which Tables were previously given were 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, 6, 7, 8, 9, 10. These are all retained, and six other rates—1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, $2\frac{1}{4}$, $2\frac{3}{4}$—have been added.

Five places of decimals are given instead of four, as was the case for some of the rates in previous editions.

The abbreviated Tables in the old form are given at $3\frac{1}{4}$, $3\frac{3}{4}$, $4\frac{1}{4}$, $4\frac{3}{4}$, and $5\frac{1}{2}$ per cent., in addition to the 18 rates mentioned above.

The present value of Perpetuities and of the Reversion to a Perpetuity are given in very much greater detail than before, both as regards the rates of interest and the number of decimal places.

The Tables dealing with the Renewals of Leases are given at more rates of interest, while the Miscellaneous Tables, such as those on pp. 104, 105, 124, etc., are extended.

The Sinking Fund Table is now given for 20 different rates of interest to 6 places of decimals for every year from 1 to 100, as compared with 10 rates of interest to (mostly) 4 places.

The Tables showing the Value of an Annuity yielding interest at one rate, and providing for replacing capital at another rate, now occupy six pages instead of less than two, and are given to 5 places of decimals instead of 2, as well as at many more rates of interest.

On pp. 122 and 123 some important Tables appear dealing with Interest payable half-yearly, quarterly, and monthly, together with a Table of constant factors for finding the values of Annuities payable half-yearly, quarterly, and monthly from the values of yearly annuities. These are quite new to the book.

The decimals of £1 are given for every farthing instead of for every penny, and the decimals of a year are given in more detail.

In the Mortality Tables and the combined Mortality and Interest Tables, very many additions of much importance have been made.

Apart from more numerous Tables and lower rates of interest, the values of the benefits according to the Healthy Males Table of the Institute of Actuaries and the Govern-

ment Experience Table of 1883 are introduced. These Tables are of the greatest value, and many of the items deduced from them are tabulated in considerable detail.

Among the Mortality Tables the English No. 3 also appears; while here, as throughout the book, all kindred tables appear on consecutive pages.

Users of the book will find reference to it facilitated, if by a glance at the Table of Contents they grasp the order in which the contents are arranged. It will be seen to be—

1. Interest apart from lives.
2. Lives apart from interest.
3. Interest in connection with single lives.
4. Interest in connection with two lives.
5. Interest in connection with three lives.
6. Logarithmic tables.

In each of the divisions 3, 4, 5, the same order is maintained. The additions in the parts of the book dealing with Interest and Mortality combined are too numerous for detailed record. Everything of any value in former editions is retained, while additions have been made that bring the whole thoroughly up to date as regards both the Mortality Tables and the rates of Interest employed.

In addition to this, care has been taken to supply such data in the Tables, and such explanations and examples in the Introduction, as to make it a perfectly simple matter to calculate the values of benefits for other ages or at other rates of interest than are contained in the Tables.

If any required information is not found in the Tables, a reference to the part of the Introduction dealing with the subject in question will probably show how the information may readily be arrived at.

Special attention may perhaps be called to the Premium Conversion Tables on pp. 185 and 186, and to the explanation of them given in the Introduction. The Annual Premium Table is given in a novel form, which, it is believed,

offers considerable advantages. Both the Conversion Tables will be found very convenient for many purposes, and readers unfamiliar with such tables would do well to spend a few minutes in grasping their nature, which is quite simple.

The Post Office Annuities are given in less detail than before, and the average rates of Insurance Companies for annuities and assurances are added.

A Table of Logarithms of Natural Numbers has been introduced in order to facilitate calculation, and especially to enable use to be made of the extremely valuable Logarithmic Tables of Interest by M. Fédor Thoman without reference to any other book. Logarithms are very easy to use, and every one engaged in calculations should avail himself of the enormous advantages they offer.

M. Thoman's Tables have been printed from stereotype plates, in which any errors that have been noticed have been corrected, but they have not been re-checked for this edition.

The difficulty of ensuring accuracy in so vast a number of figures will be well understood, and it can scarcely be hoped that no errors exist. Very great care has been taken in calculating and checking the Tables, and in reading and re-reading the proofs, but as there are considerably more than a quarter of a million figures in the book, the entire absence of errors is improbable. Any users of the book who come across even a single mistake would confer a benefit by reporting it to the PUBLISHERS for correction in future editions.

The great majority of the calculations have been made by Tate's Arithmometer. Even with this powerful aid the preparation of the book, involving the formation of many fresh Tables and the checking of many existing ones, has been an arduous task ; without an efficient calculating machine it would have been scarcely practicable.

In former editions the headings of the Tables rather suggested the limitation of their use to one specific purpose, whereas most of the Tables are available for many purposes.

The headings of the Tables are now stated in a more general form, and in the Introduction examples are given of some of the various uses to which they may be put. In consequence, some habitual users of 'Inwood' may, perhaps, miss the familiar heading, and at first fail to recognise a well-known Table in its new garb. To obviate any inconvenience of this kind, and to increase the facility with which the book can be consulted, a full and specially arranged Table of Contents (pp. xi–xvi) has been prefixed, by reference to which any information needed may at once be found. An extensive collection of Examples has also been supplied (pp. 42–48), in which the actual working of every Table is illustrated.

The book, as it now stands, serves innumerable purposes, but any suggestions (to be addressed to the PUBLISHERS) tending to increase its usefulness and convenience will be greatly appreciated and carefully considered, with a view to their adoption in future issues.

In regard to such of the Tables in the book as are based on the Healthy Males Tables of Mortality, I am greatly indebted to the Council of the Institute of Actuaries, who have kindly given permission for the use in this volume of their valuable copyrights.

WILLIAM SCHOOLING.

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INTEREST TABLES

TABLE FOR THE PURCHASING OF LEASES,
ESTATES, OR ANNUITIES
FOR TERMS OF YEARS CERTAIN

PRESENT VALUE OF THE REVERSION OF A
PERPETUITY

PRESENT VALUE OF ONE POUND AND OF
ONE POUND PER ANNUM

EXAMPLES

OF THE USE OF TABLES ON PAGES xx–xl

(1) *Find the price to be paid for a lease yielding a clear annual rent of £132 for 25½ years in order to make 3½ per cent. on the purchase price.*

£1 per annum for 25½ years $\quad\quad$ = £16·777	xxiii
£132 $\quad$,, $\quad$,, $\quad$,, $\quad$ = 16·777 × 132 = 2214·564	
or 132 × 16 = $\quad$ 2112	xxiii
132 × $\frac{1}{2}$ = $\quad$ 66	xxiii
132 × $\frac{1}{4}$ = $\quad$ 33	xxiii
132 × 16¾ = £2211	

There is a difference of £3·564 or £3 11s. 3d. due to the fact that 16¾ equals only 16·75c, whereas the correct figure is 16·777. The difference between these two is ·027, and this multiplied by 132 gives 3·564, the difference between the two answers.

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(2) *Find the present value of an annuity of £80 to run for 65 years certain such that the purchaser will obtain interest at 4%.*

1 per annum for 65 years $\quad\quad$ = £23·047	xxx
80 $\quad$,, $\quad$,, $\quad$,, $\quad$ = 23·047 × 80 = 1843·760	
or 23 × 80 = £1840	xxx

The explanation of the difference between the two answers is given under example (1).

Such transactions as these two imply that if the purchaser drew interest on his capital at the rate assumed and invested the balance of the annuity at compound interest, this balance at the end of the term would amount to the purchase price and so replace the capital invested. Thus, to take the last example :—

The annual income = £80·000
4 % on price £1843·760 = 73·750

The annual balance = £6·250

£6·250 per annum accumulated for 65 years
= 6·250 × 294·968 = £1843·550 $\quad$ | 71

This amount agrees closely with the value found, and would agree exactly if more places of decimals were used in the calculation.

(3) *Find the present value of a perpetual income of £25 per annum to commence 30 years hence so that the investment may yield 5 per cent.*

Value of reversion to a perpetuity of £1 =   £4·628
    ,,   ,,   ,,   £25 = 4·628 × 25 =   115·700   xxxvi

or $25 × 4\frac{3}{4}$ = £118 15s.   xxxvi

The difference between the answers is explained under example (1).

The nature of reversions is explained on pp. 13, 14.

———————————

(4) *Find the present value of £1,000,000 due at the end of 100 years at 15 %.*

The present value of 1 in 100 years = £·0000009   xl
     ,,   ,,   1,000,000 ,, $\Big\}$ = ·9
    = ·0000009 × 1,000,000 $\Big)$

This example is principally given to show the startling fact that a modest 18s. would at 15 % compound interest accumulate in 100 years to the vast amount of £1,000,000.

———————————

(5) *Find the present value of £40 per annum to be received for 20 years certain so that the purchaser would obtain 15 %.*

£1 per annum for 20 years = £6·2593315   xl
£40   ,,   = 6·2593315 × 40 = 250·3732600

——————————— ———

Other examples of the working of the tables in this book are given on pp. 42–48.

TABLE for the **PURCHASING** of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 1½%		Years' Purchase 1¾%		Years' Purchase 2%		Years' Purchase 2¼%		Years
½	·496	½	·496	½	·495	½	·494	½	½
1	·985	1	·983	1	·980	1	·978	1	1
1½	1·478	1½	1·474	1½	1·470	1½	1·467	1½	1½
2	1·956	2	1·949	2	1·942	2	1·934	2	2
2½	2·445	2½	2·436	2½	2·427	2½	2·418	2½	2½
3	2·912	3	2·898	3	2·884	3	2·870	2¾	3
3½	3·397	3½	3·381	3½	3·364	3¼	3·348	3¼	3½
4	3·854	3¾	3·831	3¾	3·808	3¾	3·785	3¾	4
4½	4·336	4¼	4·300	4¼	4·283	4¼	4·257	4¼	4½
5	4·783	4¾	4·748	4¾	4·713	4¾	4·679	4¾	5
5½	5·260	5¼	5·222	5¼	5·184	5¼	5·146	5¼	5½
6	5·697	5¾	5·649	5¾	5·601	5½	5·554	5½	6
6½	6·171	6¼	6·119	6	6·067	6	6·016	6	6½
7	6·598	6½	6·535	6½	6·472	6½	6·410	6½	7
7½	7·069	7	7·000	7	6·933	7	6·866	6¾	7½
8	7·486	7½	7·405	7½	7·325	7¼	7·247	7¼	8
8½	7·953	8	7·866	7¾	7·781	7¾	7·697	7¾	8½
9	8·361	8¼	8·260	8¼	8·162	8¼	8·066	8	9
9½	8·823	8¾	8·717	8¾	8·613	8½	8·510	8½	9½
10	9·222	9¼	9·101	9	8·983	9	8·866	8¾	10
10½	9·681	9¾	9·554	9½	9·428	9½	9·306	9¼	10½
11	10·071	10	9·927	10	9·787	9¾	9·649	9¾	11
11½	10·527	10½	10·376	10¼	10·228	10¼	10·083	10	11½
12	10·908	11	10·740	10¾	10·575	10½	10·415	10½	12
12½	11·359	11¼	11·184	11¼	11·012	11	10·843	10¾	12½
13	11·732	11¾	11·538	11½	11·348	11¼	11·164	11¼	13
13½	12·180	12¼	11·977	12	11·780	11¾	11·587	11½	13½
14	12·543	12½	12·322	12¼	12·106	12	11·896	12	14
14½	12·988	13	12·758	12¾	12·533	12¼	12·314	12¼	14½
15	13·343	13¼	13·093	13	12·849	12¾	12·612	12½	15
15½	13·784	13¾	13·524	13½	13·271	13¼	13·025	13	15½
16	14·131	14¼	13·851	13¾	13·578	13½	13·313	13¼	16
16½	14·569	14½	14·278	14¼	13·995	14	13·720	13¾	16½
17	14·908	15	14·595	14½	14·292	14¼	13·998	14	17
17½	15·341	15¼	15·018	15	14·704	14¾	14·400	14½	17½
18	15·673	15¾	15·327	15¼	14·992	15	14·668	14¾	18
18½	16·103	16	15·746	15¾	15·400	15½	15·064	15	18½
19	16·426	16½	16·046	16	15·678	15¾	15·323	15¼	19
19½	16·853	16¾	16·461	16½	16·082	16	15·715	15¾	19½
20	17·169	17¼	16·753	16¾	16·351	16¼	15·964	16	20
20½	17·592	17½	17·163	17¼	16·750	16¾	16·350	16¼	20½
21	17·900	18	17·448	17½	17·011	17	16·590	16½	21
21½	18·319	18¼	17·854	17¾	17·405	17¼	16·972	17	21½
22	18·621	18½	18·130	18¼	17·658	17¾	17·203	17¼	22
22½	19·037	19	18·533	18½	18·047	18	17·580	17½	22½
23	19·331	19¼	18·801	18¾	18·292	18¼	17·803	17¾	23
23½	19·743	19¾	19·200	19¼	18·677	18¾	18·174	18¼	23½
24	20·030	20	19·461	19½	18·914	19	18·389	18½	24
24½	20·439	20½	19·855	19¾	19·294	19¼	18·755	18¾	24½
25	20·720	20¾	20·109	20	19·523	19½	18·962	19	25

EXAMPLES.—A lease or annuity for 14 years to make 2 per cent. and to get back the principal is worth 12·106, or 12 years' purchase of the *clear* annual rent. At 3 per cent. it is worth 11·296, or 11¼ years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 2½ %		Years' Purchase 2¾ %		Years' Purchase 3 %		Years' Purchase 3½ %		Years
½	·494	½	·493	½	·493	½	·491	½	½
I	·976	I	·973	I	·971	I	·966	I	I
1½	1·463	1½	1·460	1½	1·456	1½	1·449	1½	1½
2	1·927	2	1·920	2	1·913	2	1·900	2	2
2½	2·409	2½	2·400	2½	2·391	2½	2·374	2¼	2½
3	2·856	2¾	2·842	2¾	2·829	2¾	2·802	2¾	3
3½	3·331	3¼	3·315	3¼	3·299	3¼	3·267	3¼	3½
4	3·762	3¾	3·739	3¾	3·717	3¾	3·673	3¾	4
4½	4·231	4¼	4·206	4¼	4·180	4¼	4·130	4¼	4½
5	4·646	4¾	4·613	4½	4·580	4½	4·515	4½	5
5½	5·109	5	5·072	5	5·036	5	4·964	5	5½
6	5·508	5½	5·462	5½	5·417	5¼	5·329	5¼	6
6½	5·965	6	5·915	6	5·866	5¾	5·769	5¾	6½
7	6·349	6¼	6·289	6¼	6·230	6¼	6·115	6	7
7½	6·800	6¾	6·736	6¾	6·672	6¾	6·546	6½	7½
8	7·170	7¼	7·094	7	7·020	7	6·874	6¾	8
8½	7·615	7½	7·534	7½	7·454	7½	7·298	7¼	8½
9	7·971	8	7·878	8	7·786	7¾	7·608	7½	9
9½	8·410	8½	8·311	8½	8·213	8¼	8·023	8	9½
10	8·752	8¾	8·640	8¾	8·530	8½	8·317	8¼	10
10½	9·185	9¼	9·066	9	8·950	9	8·724	8¾	10½
11	9·514	9½	9·382	9½	9·253	9¼	9·002	9	11
11½	9·941	10	9·802	9¾	9·665	9¾	9·401	9½	11½
12	10·258	10¼	10·104	10	9·954	10	9·663	9¾	12
12½	10·679	10¾	10·518	10½	10·360	10¼	10·054	10	12½
13	10·983	11	10·807	10¾	10·635	10¾	10·303	10¼	13
13½	11·398	11½	11·214	11¼	11·034	11	10·686	10¾	13½
14	11·691	11¾	11·491	11½	11·296	11¼	10·921	11	14
14½	12·100	12	11·891	12	11·688	11¾	11·296	11¼	14½
15	12·381	12½	12·157	12¼	11·938	12	11·517	11½	15
15½	12·785	12¾	12·551	12½	12·323	12¼	11·885	12	15½
16	13·055	13	12·805	12¾	12·561	12½	12·094	12	16
16½	13·452	13½	13·192	13¼	12·939	13	12·454	12½	16½
17	13·712	13¾	13·435	13½	13·166	13¼	12·651	12¾	17
17½	14·104	14	13·817	13¾	13·538	13½	13·004	13	17½
18	14·353	14¼	14·049	14	13·754	13¾	13·190	13¼	18
18½	14·739	14¾	14·424	14½	14·119	14	13·535	13½	18½
19	14·979	15	14·646	14¾	14·324	14¼	13·710	13¾	19
19½	15·359	15¼	15·015	15	14·682	14½	14·047	14	19½
20	15·589	15½	15·227	15¼	14·877	15	14·212	14¼	20
20½	15·964	16	15·591	15½	15·229	15¼	14·543	14½	20½
21	16·185	16¼	15·793	15¾	15·415	15½	14·698	14¾	21
21½	16·554	16½	16·150	16¼	15·761	15¾	15·021	15	21½
22	16·765	16¾	16·344	16¼	15·937	16	15·167	15¼	22
22½	17·129	17¼	16·695	16¾	16·276	16¼	15·483	15½	22½
23	17·332	17½	16·879	17	16·444	16½	15·620	15½	23
23½	17·690	17¾	17·225	17¼	16·777	16¾	15·929	16	23½
24	17·885	18	17·401	17½	16·936	17	16·058	16	24
24½	18·238	18¼	17·740	17¾	17·262	17¼	16·361	16¼	24½
25	18·424	18½	17·908	18	17·413	17½	16·482	16½	25

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 1½ %		Years' Purchase 1¾ %		Years' Purchase 2 %		Years' Purchase 2¼ %		Years
25½	21·125	21	20·499	20½	19·894	20	19·324	19¼	25½
26	21·399	21½	20·746	20¾	20·121	20	19·523	19½	26
26½	21·800	21¾	21·132	21¼	20·492	20½	19·880	20	26½
27	22·068	22	21·372	21¼	20·707	20¾	20·072	20	27
27½	22·466	22½	21·754	21¾	21·074	21	20·423	20½	27½
28	22·727	22¾	21·987	22	21·281	21¼	20·608	20½	28
28½	23·121	23	22·365	22¼	21·644	21¾	20·955	21	28½
29	23·376	23½	22·592	22½	21·844	21¾	21·132	21¼	29
29½	23·767	23¾	22·966	23	22·202	22¼	21·474	21½	29½
30	24·016	24	23·186	23¼	22·396	22½	21·645	21¾	30
30½	24·404	24½	23·556	23½	22·750	22¾	21·983	22	30½
31	24·646	24¾	23·770	23¾	22·938	23	22·147	22¼	31
31½	25·031	25	24·136	24¼	23·287	23¼	22·480	22½	31½
32	25·267	25¼	24·344	24¼	23·468	23½	22·638	22¾	32
32½	25·648	25¾	24·707	24¾	23·813	23¾	22·966	23	32½
33	25·879	26	24·908	25	23·989	24	23·118	23	33
33½	26·257	26¼	25·267	25¼	24·329	24¼	23·441	23½	33½
34	26·482	26½	25·462	25½	24·499	24½	23·587	23½	34
34½	26·856	26¾	25·817	25¾	24·835	24¾	23·905	24	34½
35	27·076	27	26·007	26	24·999	25	24·046	24	35
35½	27·446	27½	26·359	26¼	25·331	25¼	24·360	24¼	35½
36	27·661	27¾	26·543	26½	25·489	25½	24·495	24½	36
36½	28·028	28	26·890	27	25·817	25¾	24·804	24¾	36½
37	28·237	28¼	27·069	27	25·969	26	24·934	25	37
37½	28·601	28½	27·413	27½	26·294	26¼	25·239	25¼	37½
38	28·805	28¾	27·586	27½	26·441	26½	25·363	25¼	38
38½	29·166	29¼	27·926	28	26·761	26¾	25·664	25¾	38½
39	29·365	29¼	28·095	28	26·903	27	25·783	25¾	39
39½	29·722	29¾	28·431	28½	27·219	27¼	26·079	26	39½
40	29·916	30	28·594	28½	27·355	27¼	26·194	26¼	40
40½	30·270	30¼	28·927	29	27·667	27¾	26·486	26½	40½
41	30·459	30½	29·085	29	27·799	27¾	26·595	26½	41
41½	30·810	30¾	29·414	29½	28·107	28	26·883	27	41½
42	30·994	31	29·568	29½	28·235	28¼	26·988	27	42
42½	31·342	31¼	29·893	30	28·539	28½	27·272	27¼	42½
43	31·521	31½	30·042	30	28·662	28¾	27·372	27¼	43
43½	31·866	31¾	30·364	30¼	28·962	29	27·652	27¾	43½
44	32·041	32	30·508	30½	29·080	29	27·748	27¾	44
44½	32·382	32½	30·826	30¾	29·376	29½	28·023	28	44½
45	32·552	32½	30·966	31	29·490	29½	28·115	28	45
45½	32·891	33	31·281	31¼	29·783	29¾	28·386	28½	45½
46	33·056	33	31·416	31½	29·892	30	28·474	28½	46
46½	33·392	33½	31·728	31¾	30·181	30¼	28·742	28¾	46½
47	33·553	33½	31·859	31¾	30·287	30¼	28·826	28¾	47
47½	33·885	34	32·167	32¼	30·571	30½	29·089	29	47½
48	34·043	34	32·294	32¼	30·673	30¾	29·170	29¼	48
48½	34·371	34¼	32·598	32½	30·954	31	29·429	29½	48½
49	34·525	34½	32·721	32¾	31·052	31	29·506	29½	49
49½	34·850	34¾	33·022	33	31·330	31¼	29·761	29¾	49½
50	35·000	35	33·141	33¼	31·424	31½	29·834	29¾	50

EXAMPLES.—A lease or annuity for 49½ years to make 2¼ per cent. and to get back the principal is worth 29·761 or 29¾ years' purchase of the *clear* annual rent. At 3½ per cent. it is worth 23·443 or 23½ years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 2½ %		Years' Purchase 2¾ %		Years' Purchase 3 %		Years' Purchase 3½ %		Years
25½	18·772	18¾	18·242	18¼	17·734	17¾	16·777	16¾	25½
26	18·951	19	18·402	18½	17·877	18	16·890	17	26
26½	19·293	19¼	18·730	18⅝	18·192	18¼	17·179	17¼	26½
27	19·464	19½	18·883	19	18·327	18½	17·285	17¼	27
27½	19·801	19¾	19·206	19¼	18·636	18¾	17·568	17½	27½
28	19·965	20	19·351	19¼	18·764	18¾	17·667	17¾	28
28½	20·297	20¼	19·668	19⅝	19·067	19	17·943	18	28½
29	20·454	20½	19·806	19⅝	19·188	19¼	18·036	18	29
29½	20·780	20⅝	20·118	20	19·485	19½	18·305	18¼	29½
30	20·930	21	20·249	20¼	19·600	19½	18·392	18½	30
30½	21·252	21¼	20·555	20½	19·892	20	18·656	18¾	30½
31	21·395	21½	20·681	20¾	20·000	20	18·736	18¾	31
31½	21·712	21¾	20·981	21	20·286	20¼	18·994	19	31½
32	21·849	21⅞	21·100	21	20·389	20½	19·069	19	32
32½	22·160	22¼	21·396	21½	20·669	20⅝	19·320	19¼	32½
33	22·292	22¼	21·509	21½	20·766	20¾	19·390	19½	33
33½	22·598	22½	21·799	21⅝	21·040	21	19·636	19⅝	33½
34	22·724	22⅝	21·906	22	21·132	21⅛	19·701	19⅝	34
34½	23·025	23	22·191	22¼	21·401	21½	19·941	20	34½
35	23·145	23¼	22·293	22¼	21·487	21½	20·001	20	35
35½	23·442	23½	22·573	22½	21·751	21⅝	20·235	20¼	35½
36	23·556	23½	22·670	22⅝	21·832	21⅞	20·290	20¼	36
36½	23·848	23¾	22·945	23	22·091	22	20·519	20½	36½
37	23·957	24	23·036	23	22·167	22¼	20·571	20½	37
37½	24·244	24¼	23·306	23¼	22·421	22½	20·794	20¾	37½
38	24·349	24¼	23·393	23½	22·492	22½	20·841	20¾	38
38½	24·631	24½	23·658	23¾	22·741	22¾	21·059	21	38½
39	24·730	24⅝	23·740	23¾	22·808	22¾	21·103	21	39
39½	25·008	25	24·000	24	23·052	23	21·315	21¼	39½
40	25·103	25	24·078	24	23·115	23	21·355	21¼	40
40½	25·376	25½	24·334	24¼	23·353	23½	21·563	21½	40½
41	25·466	25½	24·407	24½	23·412	23½	21·599	21½	41
41½	25·735	25¾	24·658	24⅝	23·646	23¾	21·802	21¾	41½
42	25·821	25¾	24·727	24¾	23·701	23¾	21·835	21¾	42
42½	26·085	26	24·973	25	23·930	24	22·033	22	42½
43	26·166	26¼	25·038	25	23·982	24	22·063	22	43
43½	26·426	26½	25·280	25¼	24·206	24¼	22·255	22¼	43½
44	26·504	26½	25·341	25¼	24·254	24¼	22·283	22¼	44
44½	26·760	26¾	25·579	25½	24·474	24½	22·471	22½	44½
45	26·833	26⅞	25·636	25¾	24·519	24½	22·495	22½	45
45½	27·084	27	25·869	25¾	24·734	24¾	22·679	22⅝	45½
46	27·154	27¼	25·924	26	24·775	24¾	22·701	22¾	46
46½	27·401	27½	26·152	26¼	24·986	25	22·880	23	46½
47	27·467	27½	26·203	26¼	25·025	25	22·899	23	47
47½	27·711	27¾	26·427	26½	25·231	25¼	23·074	23	47½
48	27·773	27¾	26·475	26½	25·267	25¼	23·091	23	48
48½	28·012	28	26·695	26⅝	25·469	25½	23·261	23¼	48½
49	28·071	28	26·740	26¾	25·502	25½	23·277	23¼	49
49½	28·306	28¼	26·955	27	25·700	25⅝	23·443	23½	49½
50	28·362	28¼	26·997	27	25·730	25¾	23·456	23½	50

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase 1½ %		Years' Purchase 1¾ %		Years' Purchase 2 %		Years' Purchase 2¼ %		Years
51	35·468	35½	33·554	33½	31·788	31⅜	30·156	30¼	51
52	35·929	36	33·960	34	32·145	32¼	30·470	30½	52
53	36·383	36½	34·358	34¼	32·495	32½	30·778	30¾	53
54	36·831	36¾	34·750	34¾	32·838	32¾	31·079	31	54
55	37·271	37¼	35·135	35¼	33·175	33⅛	31·373	31¼	55
56	37·706	37¾	35·514	35½	33·505	33½	31·660	31⅜	56
57	38·134	28¼	35·886	36	33·828	33¾	31·942	32	57
58	38·556	38½	36·252	36¼	34·145	34¼	32·217	32¼	58
59	38·971	39	36·611	36½	34·456	34½	32·486	32½	59
60	39·380	39½	36·964	37	34·761	34¾	32·749	32¾	60
61	39·784	39¾	37·311	37¼	35·060	35	33·006	33	61
62	40·181	40¼	37·652	37¾	35·353	35¼	33·258	33¼	62
63	40·572	40½	37·987	38	35·640	35¾	33·504	33½	63
64	40·958	41	38·317	38¼	35·921	36	33·745	33¾	64
65	41·338	41¼	38·641	38¾	36·197	36¼	33·980	34	65
66	41·712	41¾	38·959	39	36·468	36½	34·211	34¼	66
67	42·081	42	39·272	39¼	36·733	36¾	34·436	34½	67
68	42·444	42½	39·579	39½	36·994	37	34·656	34¾	68
69	42·802	42¾	39·881	40	37·249	37¼	34·871	34¾	69
70	43·155	43¼	40·178	40¼	37·499	37½	35·082	35	70
71	43·502	43½	40·470	40½	37·744	37¾	35·288	35¼	71
72	43·845	43¾	40·756	40¾	37·984	38	35·490	35½	72
73	44·182	44¼	41·038	41	38·220	38¼	35·687	35¾	73
74	44·514	44½	41·315	41¼	38·451	38½	35·879	36	74
75	44·842	44¾	41·587	41½	38·677	38¾	36·068	36	75
76	45·164	45¼	41·855	41¾	38·899	39	36·252	36¼	76
77	45·482	45½	42·118	42	39·117	39	36·432	36½	77
78	45·795	45¾	42·376	42¼	39·330	39¼	36·609	36½	78
79	46·103	46	42·630	42⅝	39·539	39½	36·781	36¾	79
80	46·407	46⅓	42·880	43	39·745	39¾	36·950	37	80
81	46·707	46¾	43·125	43	39·946	40	37·115	37	81
82	47·002	47	43·366	43¼	40·143	40⅛	37·276	37¼	82
83	47·292	47¼	43·603	43½	40·336	40¼	37·434	37¼	83
84	47·579	47½	43·836	43¾	40·526	40½	37·588	37½	84
85	47·861	47¾	44·065	44	40·711	40¾	37·739	37¾	85
86	48·139	48¼	44·290	44¼	40·893	41	37·886	38	86
87	48·412	48⅓	44·511	44½	41·072	41	38·031	38	87
88	48·682	48¾	44·728	44¾	41·247	41¼	38·172	38¼	88
89	48·948	49	44·942	45	41·419	41½	38·310	38¼	89
90	49·210	49¼	45·152	45¼	41·587	41½	38·445	38½	90
91	49·468	49½	45·358	45¼	41·752	41¾	38·577	38½	91
92	49·722	49¾	45·561	45½	41·914	42	38·706	38⅝	92
93	49·972	50	45·760	45¾	42·072	42	38·832	38¾	93
94	50·219	50¼	45·956	46	42·228	42¼	38·956	39	94
95	50·462	50½	46·148	46¼	42·380	42⅜	39·077	39	95
96	50·702	50¾	46·337	46¼	42·529	42½	39·195	39¼	96
97	50·938	51	46·523	46½	42·676	42⅔	39·310	39¼	97
98	51·170	51¼	46·706	46¾	42·820	42¾	39·423	39½	98
99	51·399	51½	46·885	47	42·960	43	39·534	39½	99
100	51·625	51¾	47·061	47	43·098	43	39·642	39¾	100

EXAMPLES.—A lease or annuity for 75 years to make 1½ per cent. and to get back the principal is worth 44·842 or 44¾ years' purchase of the *clear* annual rent. At 2 per cent. it is worth 38·677 or 38¾ years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase 2½%		Years' Purchase 2¾%		Years' Purchase 3%		Years' Purchase 3½%		Years
51	28·646	28⅔	27·248	27¼	25·951	26	23·629	23¾	51
52	28·923	29	27·492	27½	26·166	26¼	23·796	23¾	52
53	29·193	29¼	27·729	27¾	26·375	26¼	23·957	24	53
54	29·457	29½	27·960	28	26·578	26½	24·113	24	54
55	29·714	29¾	28·185	28¼	26·774	26⅔	24·264	24¼	55
56	29·965	30	28·404	28½	26·965	27	24·410	24½	56
57	30·210	30¼	28·617	28½	27·151	27¼	24·550	24½	57
58	30·448	30½	28·825	28¾	27·331	27¼	24·686	24¾	58
59	30·681	30¾	29·026	29	27·506	27½	24·818	24¾	59
60	30·909	31	29·223	29¼	27·676	27¾	24·945	25	60
61	31·130	31¼	29·414	29½	27·840	27¾	25·067	25	61
62	31·347	31¼	29·600	29½	28·000	28	25·186	25¼	62
63	31·558	31½	29·781	29¾	28·156	28¼	25·300	25¼	63
64	31·764	31¾	29·957	30	28·306	28¼	25·411	25½	64
65	31·965	32	30·128	30¼	28·453	28½	25·518	25½	65
66	32·161	32¼	30·295	30¼	28·595	28½	25·621	25½	66
67	32·352	32¼	30·458	30½	28·733	28¾	25·721	25¾	67
68	32·538	32½	30·616	30½	28·867	28¾	25·817	25¾	68
69	32·720	32¾	30·770	30¾	28·997	29	25·910	26	69
70	32·898	33	30·919	31	29·123	29	26·000	26	70
71	33·071	33	31·065	31	29·246	29¼	26·087	26	71
72	33·240	33¼	31·207	31¼	29·365	29¼	26·171	26¼	72
73	33·405	33½	31·345	31¼	29·481	29½	26·253	26¼	73
74	33·566	33½	31·479	31½	29·593	29½	26·331	26¼	74
75	33·723	33¾	31·610	31½	29·702	29¾	26·407	26½	75
76	33·876	34	31·737	31¾	29·808	29¾	26·480	26½	76
77	34·025	34	31·861	31¾	29·910	30	26·551	26½	77
78	34·171	34¼	31·982	32	30·010	30	26·619	26½	78
79	34·313	34¼	32·099	32	30·107	30	26·685	26¾	79
80	34·452	34½	32·213	32¼	30·201	30¼	26·749	26¾	80
81	34·587	34½	32·324	32¼	30·292	30¼	26·810	26¾	81
82	34·719	34¾	32·432	32½	30·381	30½	26·870	26¾	82
83	34·848	34¾	32·537	32½	30·467	30½	26·928	27	83
84	34·974	35	32·640	32⅔	30·550	30½	26·983	27	84
85	35·096	35	32·739	32¾	30·631	30¾	27·037	27	85
86	35·216	35¼	32·836	32¾	30·710	30¾	27·089	27	86
87	35·333	35¼	32·931	33	30·786	30¾	27·139	27¼	87
88	35·446	35½	33·023	33	30·860	30¾	27·187	27¼	88
89	35·557	35½	33·112	33	30·932	31	27·234	27¼	89
90	35·666	35¾	33·199	33¼	31·002	31	27·279	27¼	90
91	35·771	35¾	33·284	33¼	31·070	31	27·323	27¼	91
92	35·875	35¾	33·366	33¼	31·136	31¼	27·365	27¼	92
93	35·975	36	33·447	33½	31·200	31¼	27·406	27½	93
94	36·073	36	33·525	33½	31·262	31¼	27·445	27½	94
95	36·169	36¼	33·601	33½	31·323	31¼	27·484	27½	95
96	36·263	36¼	33·675	33¾	31·381	31½	27·520	27½	96
97	36·354	36¼	33·746	33¾	31·438	31½	27·556	27½	97
98	36·443	36½	33·817	33¾	31·493	31½	27·590	27½	98
99	36·529	36½	33·885	34	31·547	31½	27·623	27½	99
100	36·614	36½	33·951	34	31·599	31½	27·655	27¾	100

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 4 %	Years'	Purchase 4½ %	Years'	Purchase 5 %	Years'	Purchase 6 %	Years
½	·490	½	·489	½	·488	½	·485	½
I	·962	I	·957	I	·952	I	·943	I
1½	1·442	1½	1·435	1½	1·428	1½	1·414	1½
2	1·886	2	1·873	1¾	1·859	1¾	1·833	2
2½	2·357	2¼	2·340	2¼	2·323	2¼	2·290	2½
3	2·775	2¾	2·749	2¾	2·723	2¾	2·673	3
3½	3·236	3¼	3·205	3¼	3·175	3	3·115	3½
4	3·630	3¾	3·588	3½	3·546	3½	3·465	4
4½	4·081	4	4·033	4	3·985	4	3·893	4½
5	4·452	4½	4·390	4½	4·329	4¼	4·212	5
5½	4·893	5	4·825	4¾	4·757	4½	4·626	5½
6	5·242	5¼	5·158	5¼	5·076	5	4·917	6
6½	5·674	5⅝	5·582	5½	5·492	5½	5·317	6½
7	6·002	6	5·893	6	5·786	5¾	5·582	7
7½	6·425	6½	6·306	6¼	6·191	6	5·969	7½
8	6·733	6¾	6·596	6½	6·463	6¼	6·210	8
8½	7·146	7¼	6·999	7	6·856	6⅜	6·583	8½
9	7·435	7½	7·269	7¼	7·108	6⅝	6·802	9
9½	7·839	7¾	7·661	7½	7·489	7¼	7·162	9½
10	8·111	8	7·913	8	7·722	7¼	7·360	10
10½	8·506	8¼	8·295	8¼	8·092	7¾	7·708	10½
11	8·760	8¾	8·529	8½	8·306	8	7·887	11
11½	9·146	9¼	8·901	9	8·666	8¼	8·222	11½
12	9·385	9½	9·119	9	8·863	8¼	8·384	12
12½	9·762	9¾	9·481	9¼	9·212	8¾	8·707	12½
13	9·986	10	9·683	9¾	9·394	8¾	8·853	13
13½	10·353	10¼	10·036	10	9·732	9¼	9·164	13½
14	10·563	10½	10·223	10¼	9·899	9¼	9·295	14
14½	10·922	11	10·566	10½	10·227	9½	9·594	14½
15	11·118	11	10·740	10½	10·380	9¼	9·712	15
15½	11·469	11¼	11·074	11	10·698	10	10·000	15½
16	11·652	11¾	11·234	11¼	10·838	10	10·106	16
16½	11·994	12	11·559	11½	11·146	10½	10·383	16½
17	12·166	12¼	11·707	11¾	11·274	10½	10·477	17
17½	12·499	12½	12·023	12	11·573	10¾	10·744	17½
18	12·659	12¾	12·160	12¼	11·690	10¾	10·828	18
18½	12·985	13	12·467	12½	11·979	11	11·084	18½
19	13·134	13¼	12·593	12½	12·085	11¼	11·158	19
19½	13·451	13½	12·891	13	12·365	11¼	11·404	19½
20	13·590	13½	13·008	13	12·462	11½	11·447	20
20½	13·900	14	13·298	13¼	12·733	11¾	11·706	20½
21	14·029	14	13·405	13½	12·821	11¼	11·764	21
21½	14·331	14¼	13·686	13¾	13·083	12	11·991	21½
22	14·451	14½	13·784	13¾	13·163	12	12·042	22
22½	14·745	14⅞	14·058	14	13·417	12¼	12·259	22½
23	14·857	14¾	14·148	14¼	13·489	12¼	12·303	23
23½	15·143	15⅛	14·413	14½	13·734	12½	12·512	23½
24	15·247	15¼	14·495	14½	13·799	12½	12·550	24
24½	15·526	15½	14·753	14¾	14·036	12⅝	12·751	24½
25	15·622	15½	14·828	14¾	14·094	12¾	12·783	25

EXAMPLES.—A lease or annuity for 13 years to make 4½ per cent. and to get back the principal is worth 9·683 or 9¾ years' purchase of the *clear* annual rent. At 5 per cent. it is worth 9·394 or 9¾ years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 7%		Years' Purchase 8%		Years' Purchase 9%		Years' Purchase 10%		Years
½	·483	½	·481	½	·478	½	·476	½	½
1	·935	I	·926	I	·917	I	·909	I	1
1½	1·401	1½	1·388	1½	1·374	1¼	1·362	1¼	1½
2	1·808	1¾	1·783	1¾	1·759	1¾	1·736	1¾	2
2½	2·258	2¼	2·226	2¼	2·195	2¼	2·165	2¼	2½
3	2·624	2½	2·577	2½	2·531	2½	2·487	2½	3
3½	3·057	3	3·001	3	2·946	3	2·893	3	3½
4	3·387	3½	3·312	3¼	3·240	3¼	3·170	3¼	4
4½	3·804	3¾	3·718	3¾	3·634	3¾	3·554	3½	4½
5	4·100	4	3·993	4	3·890	4	3·791	3¾	5
5½	4·501	4¼	4·380	4½	4·264	4¼	4·153	4¼	5½
6	4·767	4¾	4·623	4½	4·486	4½	4·355	4¼	6
6½	5·151	5¼	4·993	5	4·841	4¾	4·697	4¾	6½
7	5·389	5½	5·206	5¼	5·033	5	4·868	4¾	7
7½	5·759	5¾	5·559	5½	5·370	5¼	5·190	5¼	7½
8	5·971	6	5·747	5¾	5·535	5½	5·335	5½	8
8½	6·326	6¼	6·083	6	5·854	5¾	5·637	5½	8½
9	6·515	6½	6·247	6¼	5·995	6	5·759	5¾	9
9½	6·855	6¾	6·567	6½	6·297	6¼	6·043	6	9½
10	7·024	7	6·710	6¾	6·418	6½	6·145 ~	6¼	10
10½	7·349	7¼	7·015	7	6·702	6¾	6·411	6½	10½
11	7·499	7½	7·139	7¼	6·805	6¾	6·495	6½	11
11½	7·810	7¾	7·428	7½	7·074	7	6·744	6¾	11½
12	7·943	8	7·536	7½	7·161	7¼	6·814	6¾	12
12½	8·241	8¼	7·811	7¾	7·414	7½	7·047	7	12½
13	8·358	8¼	7·904	8	7·487	7½	7·103	7	13
13½	8·643	8¾	8·165	8¼	7·726	7¾	7·322	7¼	13½
14	8·745	8½	8·244	8¼	7·786	7¾	7·367	7¼	14
14½	9·018	9	8·492	8½	8·011	8	7·571	7½	14½
15	9·108	9	8·559	8½	8·061	8	7·606	7½	15
15½	9·368	9¼	8·794	8¾	8·272	8¼	7·796	7¾	15½
16	9·447	9½	8·851	8¾	8·313	8¼	7·824	7¾	16
16½	9·695	9¾	9·074	9	8·511	8½	8·001	8	16½
17	9·763	9¾	9·122	9	8·544	8½	8·022	8	17
17½	10·000	10	9·332	9¼	8·731	8¾	8·187	8¼	17½
18	10·059	10	9·372	9¼	8·756	8¾	8·201	8¼	18
18½	10·285	10¼	9·571	9½	8·931	9	8·356	8¼	18½
19	10·336	10¼	9·604	9½	8·950	9	8·365	8¼	19
19½	10·551	10½	9·792	9¾	9·111	9	8·509	8½	19½
20	10·594	10½	9·818	9¾	9·129	9¼	8·514	8½	20
20½	10·800	10¾	9·997	10	9·283	9¼	8·647	8¾	20½
21	10·836	10¾	10·017	10	9·292	9¼	8·649	8¾	21
21½	11·031	11	10·185	10¼	9·437	9½	8·773	8¾	21½
22	11·061	11	10·201	10¼	9·442	9½	8·772	8½	22
22½	11·248	11¼	10·360	10¼	9·578	9½	8·887	9	22½
23	11·272	11¼	10·371	10¼	9·580	9½	8·883	9	23
23½	11·450	11½	10·521	10½	9·707	9¾	8·991	9	23½
24	11·469	11½	10·529	10½	9·707	9¾	8·985	9	24
24½	11·638	11¾	10·671	10¾	9·826	9¾	9·084	9	24½
25	11·654	11¾	10·675	10¾	9·823	9¾	9·077	9	25

INTEREST TABLES

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase	4 %	Years' Purchase	4½ %	Years' Purchase	5 %	Years' Purchase	6 %	Years
25½	15·894	16	15·078	15	14·323	14¼	12·976	13	25½
26	15·983	16	15·147	15¼	14·375	14½	13·003	13	26
26½	16·248	16¼	15·389	15¼	14·597	14½	13·187	13¼	26½
27	16·330	16¼	15·451	15½	14·643	14¾	13·211	13¼	27
27½	16·587	16½	15·686	15¾	14·857	14¾	13·387	13½	27½
28	16·663	16¾	15·743	15¾	14·898	15	13·406	13½	28
28½	16·914	17	15·971	16	15·105	15	13·575	13½	28½
29	16·984	17	16·022	16	15·141	15¼	13·591	13½	29
29½	17·228	17¼	16·243	16¼	15·341	15¼	13·753	13¾	29½
30	17·292	17¼	16·289	16¼	15·372	15¼	13·765	13¾	30
30½	17·530	17½	16·503	16½	15·565	15½	13·920	14	30½
31	17·588	17½	16·544	16½	15·593	15½	13·929	14	31
31½	17·820	17¾	16·752	16¾	15·779	15¾	14·078	14	31½
32	17·874	17¾	16·789	16¾	15·803	15¾	14·084	14	32
32½	18·099	18	16·990	17	15·982	16	14·226	14¼	32½
33	18·148	18¼	17·023	17	16·003	16	14·230	14¼	33
33½	18·367	18¼	17·218	17¼	16·176	16¼	14·367	14¼	33½
34	18·411	18½	17·247	17¼	16·193	16¼	14·368	14¼	34
34½	18·624	18½	17·436	17⅓	16·360	16¼	14·499	14½	34½
35	18·665	18¾	17·461	17½	16·374	16¼	14·498	14½	35
35½	18·872	18¾	17·644	17¾	16·536	16½	14·623	14½	35½
36	18·908	19	17·666	17¾	16·547	16½	14·621	14½	36
36½	19·110	19	17·843	17¾	16·702	16¾	14·740	14¾	36½
37	19·143	19¼	17·862	17¾	16·711	16¾	14·737	14¾	37
37½	19·339	19¼	18·034	18	16·861	16¾	14·851	14¾	37½
38	19·368	19½	18·050	18	16·868	16¾	14·846	14¾	38
38½	19·558	19½	18·216	18¼	17·013	17	14·955	15	38½
39	19·584	19½	18·230	18¼	17·017	17	14·949	15	39
39½	19·770	19¾	18·391	18½	17·157	17¼	15·053	15	39½
40	19·793	19¾	18·402	18½	17·159	17¼	15·046	15	40
40½	19·973	20	18·557	18½	17·294	17¼	15·146	15¼	40½
41	19·993	20	18·566	18½	17·294	17¼	15·138	15¼	41
41½	20·168	20¼	18·717	18¾	17·424	17½	15·233	15¼	41½
42	20·186	20¼	18·724	18¾	17·423	17½	15·225	15¼	42
42½	20·356	20¼	18·869	18¾	17·548	17½	15·316	15¼	42½
43	20·371	20½	18·874	18¾	17·546	17½	15·306	15¼	43
43½	20·536	20½	19·015	19	17·666	17¾	15·393	15½	43½
44	20·549	20½	19·018	19	17·663	17¾	15·383	15½	44
44½	20·709	20¾	19·155	19¼	17·779	17¾	15·466	15½	44½
45	20·720	20¾	19·156	19¼	17·774	17¾	15·456	15½	45
45½	20·876	21	19·288	19¼	17·886	18	15·535	15½	45½
46	20·885	21	19·288	19¼	17·880	18	15·524	15½	46
46½	21·036	21	19·416	19½	17·988	18	15·600	15½	46½
47	21·043	21	19·415	19½	17·981	18	15·589	15½	47
47½	21·190	21¼	19·538	19½	18·085	18	15·661	15¾	47½
48	21·195	21¼	19·536	19½	18·077	18	15·650	15¾	48
48½	21·338	21¼	19·655	19¾	18·177	18¼	15·719	15¾	48½
49	21·341	21¼	19·651	19¾	18·169	18¼	15·708	15¾	49
49½	21·480	21½	19·767	19¾	18·265	18¼	15·773	15¾	49½
50	21·482	21½	19·762	19¾	18·256	18¼	15·762	15¾	50

EXAMPLES.—A lease or annuity for 40 years to make 4 per cent. and to get back the principal is worth 19·793 or 19¾ years' purchase of the *clear* annual rent. At 6 per cent. it is worth 15·046 or 15 years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase 7 %		Years' Purchase 8 %		Years' Purchase 9 %		Years' Purchase 10 %		Years
25½	11·814	11¾	10·809	10¾	9·934	10	9·169	9¼	25½
26	11·826	11¾	10·810	10¾	9·929	10	9·161	9¼	26
26½	11·979	12	10·936	11	10·033	10	9·247	9¼	26½
27	11·987	12	10·935	11	10·027	10	9·237	9¼	27
27½	12·132	12¼	11·054	11	10·124	10	9·317	9¼	27½
28	12·137	12¼	11·051	11	10·116	10	9·307	9¼	28
28½	12·275	12¼	11·163	11¼	10·207	10¼	9·380	9½	28½
29	12·278	12¼	11·158	11¼	10·198	10¼	9·370	9½	29
29½	12·409	12½	11·264	11¼	10·283	10¼	9·438	9½	29½
30	12·409	12½	11·258	11¼	10·274	10¼	9·427	9½	30
30½	12·534	12½	11·357	11¼	10·353	10¼	9·490	9½	30½
31	12·532	12½	11·350	11¼	10·343	10¼	9·479	9½	31
31½	12·650	12¾	11·444	11½	10·417	10½	9·538	9½	31½
32	12·647	12¾	11·435	11½	10·406	10½	9·526	9½	32
32½	12·759	12¾	11·523	11½	10·475	10½	9·581	9½	32½
33	12·754	12¾	11·514	11½	10·464	10½	9·569	9½	33
33½	12·860	12¾	11·597	11½	10·529	10½	9·620	9½	33½
34	12·854	12¾	11·587	11½	10·518	10½	9·609	9½	34
34½	12·955	13	11·665	11¾	10·578	10½	9·655	9¾	34½
35	12·948	13	11·655	11¾	10·567	10½	9·644	9¾	35
35½	13·044	13	11·728	11¾	10·623	10½	9·687	9¾	35½
36	13·035	13	11·717	11¾	10·612	10½	9·677	9¾	36
36½	13·126	13	11·786	11¾	10·664	10¾	9·716	9¾	36½
37	13·117	13	11·775	11¾	10·653	10¾	9·706	9¾	37
37½	13·203	13¼	11·840	11¾	10·702	10¾	9·742	9¾	37½
38	13·193	13¼	11·829	11¾	10·691	10¾	9·733	9¾	38
38½	13·275	13¼	11·890	12	10·736	10¾	9·766	9¾	38½
39	13·265	13¼	11·879	12	10·726	10¾	9·757	9¾	39
39½	13·342	13¼	11·936	12	10·768	10¾	9·788	9¾	39½
40	13·332	13¼	11·925	12	10·757	10¾	9·779	9¾	40
40½	13·405	13½	11·979	12	10·797	10¾	9·808	9¾	40½
41	13·394	13½	11·967	12	10·787	10¾	9·799	9¾	41
41½	13·464	13½	12·018	12	10·823	10¾	9·826	9¾	41½
42	13·452	13½	12·007	12	10·813	10¾	9·817	9¾	42
42½	13·518	13½	12·054	12	10·848	10¾	9·842	9¾	42½
43	13·507	13½	12·043	12	10·838	10¾	9·834	9¾	43
43½	13·569	13½	12·088	12	10·870	10¾	9·857	9¾	43½
44	13·558	13½	12·077	12	10·861	10¾	9·849	9¾	44
44½	13·617	13½	12·119	12	10·890	11	9·870	9¾	44½
45	13·606	13½	12·108	12	10·881	11	9·863	9¾	45
45½	13·662	13¾	12·148	12¼	10·909	11	9·882	10	45½
46	13·650	13¾	12·137	12¼	10·900	11	9·875	10	46
46½	13·703	13¾	12·174	12¼	10·926	11	9·893	10	46½
47	13·692	13¾	12·164	12¼	10·918	11	9·887	10	47
47½	13·742	13¾	12·199	12¼	10·941	11	9·903	10	47½
48	13·730	13¾	12·189	12¼	10·934	11	9·897	10	48
48½	13·778	13¾	12·222	12¼	10·956	11	9·912	10	48½
49	13·767	13¾	12·212	12¼	10·948	11	9·906	10	49
49½	13·812	13¾	12·243	12¼	10·969	11	9·920	10	49½
50	13·801	13¾	12·233	12¼	10·962	11	9·915	10	50

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase 4 %		Years' Purchase 4½ %		Years' Purchase 5 %		Years' Purchase 6 %		Years
51	21·617	21½	19·868	19¾	18·339	18½	15·813	15¾	51
52	21·748	21½	19·969	20	18·418	18½	15·861	15¾	52
53	21·873	21¾	20·066	20	18·493	18½	15·907	16	53
54	21·993	22	20·159	20¼	18·565	18½	15·950	16	54
55	22·109	22	20·248	20¼	18·633	18¾	15·991	16	55
56	22·220	22¼	20·333	20¼	18·699	18¾	16·029	16	56
57	22·327	22¼	20·414	20½	18·761	18¾	16·065	16	57
58	22·430	22½	20·492	20½	18·820	18¾	16·099	16	58
59	22·528	22½	20·567	20½	18·876	19	16·131	16¼	59
60	22·623	22½	20·638	20¾	18·929	19	16·161	16¼	60
61	22·715	22¾	20·706	20¾	18·980	19	16·190	16¼	61
62	22·803	22¾	20·772	20¾	19·029	19	16·217	16¼	62
63	22·887	23	20·834	20¾	19·075	19	16·242	16¼	63
64	22·969	23	20·894	21	19·119	19	16·266	16¼	64
65	23·047	23	20·951	21	19·161	19¼	16·289	16¼	65
66	23·122	23	21·006	21	19·201	19¼	16·310	16¼	66
67	23·194	23¼	21·058	21	19·239	19¼	16·331	16¼	67
68	23·264	23¼	21·108	21	19·275	19¼	16·350	16¼	68
69	23·330	23¼	21·156	21¼	19·310	19¼	16·368	16¼	69
70	23·395	23½	21·202	21¼	19·343	19¼	16·385	16½	70
71	23·456	23½	21·246	21¼	19·374	19¼	16·401	16½	71
72	23·516	23½	21·288	21¼	19·404	19½	16·412	16½	72
73	23·573	23½	21·328	21¼	19·432	19½	16·430	16½	73
74	23·628	23¾	21·367	21¼	19·459	19½	16·443	16½	74
75	23·680	23¾	21·404	21½	19·485	19½	16·456	16½	75
76	23·731	23¾	21·439	21½	19·509	19½	16·468	16½	76
77	23·780	23¾	21·473	21½	19·533	19½	16·479	16½	77
78	23·827	23¾	21·505	21½	19·555	19½	16·490	16½	78
79	23·872	23¾	21·536	21½	19·576	19½	16·500	16½	79
80	23·915	24	21·565	21½	19·596	19½	16·509	16½	80
81	23·957	24	21·594	21½	19·616	19½	16·518	16½	81
82	23·997	24	21·621	21½	19·634	19¾	16·526	16½	82
83	24·036	24	21·647	21¾	19·651	19¾	16·534	16½	83
84	24·073	24	21·671	21¾	19·668	19¾	16·542	16½	84
85	24·109	24	21·695	21¾	19·684	19¾	16·549	16½	85
86	24·143	24¼	21·718	21¾	19·699	19¾	16·556	16½	86
87	24·176	24¼	21·740	21¾	19·713	19¾	16·562	16½	87
88	24·207	24¼	21·760	21¾	19·727	19¾	16·568	16½	88
89	24·238	24¼	21·780	21¾	19·740	19¾	16·573	16½	89
90	24·267	24¼	21·799	21¾	19·752	19¾	16·579	16½	90
91	24·295	24¼	21·817	21¾	19·764	19¾	16·584	16½	91
92	24·323	24¼	21·835	21¾	19·775	19¾	16·588	16½	92
93	24·349	24¼	21·852	21¾	19·786	19¾	16·593	16½	93
94	24·374	24¼	21·868	21¾	19·796	19¾	16·597	16½	94
95	24·398	24½	21·883	22	19·806	19¾	16·601	16½	95
96	24·421	24½	21·897	22	19·815	19¾	16·605	16½	96
97	24·443	24½	21·911	22	19·824	19¾	16·608	16½	97
98	24·465	24½	21·925	22	19·832	19¾	16·611	16½	98
99	24·485	24½	21·938	22	19·840	19¾	16·615	16½	99
100	24·50	24½	21·950	22	19·848	19¾	16·618	16½	100

EXAMPLES.—A lease or annuity for 70 years to make 4 per cent. and to get back the principal is worth 23·395 or 23½ years' purchase of the *clear* annual rent. At 6 per cent. it is worth 16·385 or 16½ years' purchase.

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 10 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase 7 %		Years' Purchase 8 %		Years' Purchase 9 %		Years' Purchase 10 %		Years
51	13·832	13¾	12·253	12¼	10·974	11	9·923	10	51
52	13·862	13¾	12·272	12¼	10·985	11	9·930	10	52
53	13·890	14	12·288	12¼	10·996	11	9·936	10	53
54	13·916	14	12·304	12¼	11·005	11	9·942	10	54
55	13·940	14	12·319	12¼	11·014	11	9·947	10	55
56	13·963	14	12·332	12½	11·022	11	9·952	10	56
57	13·984	14	12·344	12½	11·029	11	9·956	10	57
58	14·003	14	12·356	12½	11·036	11	9·960	10	58
59	14·022	14	12·367	12½	11·042	11	9·964	10	59
60	14·039	14	12·377	12½	11·048	11	9·967	10	60
61	14·055	14	12·386	12½	11·053	11	9·970	10	61
62	14·070	14	12·394	12½	11·058	11	9·973	10	62
63	14·084	14	12·402	12½	11·062	11	9·975	10	63
64	14·098	14	12·409	12½	11·066	11	9·978	10	64
65	14·110	14	12·416	12½	11·070	11	9·980	10	65
66	14·121	14	12·422	12½	11·073	11	9·981	10	66
67	14·132	14¼	12·428	12½	11·077	11	9·983	10	67
68	14·142	14¼	12·433	12½	11·079	11	9·985	10	68
69	14·152	14¼	12·438	12½	11·082	11	9·986	10	69
70	14·160	14¼	12·443	12½	11·084	11	9·987	10	70
71	14·169	14¼	12·447	12½	11·087	11	9·988	10	71
72	14·176	14¼	12·451	12½	11·089	11	9·990	10	72
73	14·183	14¼	12·455	12½	11·091	11	9·990	10	73
74	14·190	14¼	12·458	12½	11·092	11	9·991	10	74
75	14·196	14¼	12·461	12½	11·094	11	9·992	10	75
76	14·202	14½	12·464	12½	11·095	11	9·993	10	76
77	14·208	14¼	12·467	12½	11·097	11	9·994	10	77
78	14·213	14¼	12·469	12½	11·098	11	9·994	10	78
79	14·218	14¼	12·471	12½	11·099	11	9·995	10	79
80	14·222	14¼	12·474	12½	11·100	11	9·995	10	80
81	14·226	14¼	12·475	12½	11·101	11	9·996	10	81
82	14·230	14¼	12·477	12½	11·102	11	9·996	10	82
83	14·234	14¼	12·479	12½	11·102	11	9·996	10	83
84	14·237	14¼	12·481	12½	11·103	11	9·997	10	84
85	14·240	14¼	12·482	12½	11·104	11	9·997	10	85
86	14·243	14¼	12·483	12½	11·104	11	9·997	10	86
87	14·246	14¼	12·485	12½	11·105	11	9·997	10	87
88	14·249	14¼	12·486	12½	11·105	11	9·998	10	88
89	14·251	14¼	12·487	12½	11·106	11	9·998	10	89
90	14·253	14¼	12·488	12½	11·106	11	9·998	10	90
91	14·255	14¼	12·489	12½	11·107	11	9·998	10	91
92	14·257	14¼	12·489	12½	11·107	11	9·998	10	92
93	14·259	14¼	12·490	12½	11·107	11	9·999	10	93
94	14·261	14¼	12·491	12½	11·108	11	9·999	10	94
95	14·263	14¼	12·492	12½	11·108	11	9·999	10	95
96	14·264	14¼	12·492	12½	11·108	11	9·999	10	96
97	14·266	14¼	12·493	12½	11·109	11	9·999	10	97
98	14·267	14¼	12·493	12½	11·109	11	9·999	10	98
99	14·268	14¼	12·494	12½	11·109	11	9·999	10	99
100	14·269	14¼	12·494	12½	11·109	11	9·999	10	100

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase 1½%		Years' Purchase 1¾%		Years' Purchase 2%		Years' Purchase 2¼%		After Years
1	65·681	65¾	56·160	56¼	49·020	49	43·466	43½	1
2	64·711	64¾	55·194	55¼	48·058	48	42·510	42½	2
3	63·754	63¾	54·245	54¼	47·116	47	41·575	41½	3
4	62·812	62¾	53·312	53¼	46·192	46¼	40·660	40¾	4
5	61·884	62	52·395	52½	45·287	45¼	39·765	39¾	5
6	60·969	61	51·494	51½	44·399	44½	38·890	39	6
7	60·068	60	50·608	50½	43·528	43½	38·034	38	7
8	59·181	59¼	49·738	49¾	42·675	42¾	37·197	37¼	8
9	58·306	58¼	48·882	49	41·838	41¾	36·379	36½	9
10	57·444	57½	48·042	48	41·017	41	35·578	35½	10
11	56·596	56½	47·215	47¼	40·213	40¼	34·795	34¾	11
12	55·759	55¾	46·403	46½	39·425	39½	34·030	34	12
13	54·935	55	45·605	45½	38·652	38¾	33·281	33¼	13
14	54·123	54	44·821	44¾	37·894	38	32·549	32½	14
15	53·323	53¼	44·050	44	37·151	37¼	31·832	31¾	15
16	52·535	52½	43·292	43¼	36·422	36½	31·132	31¼	16
17	51·759	51¾	42·548	42½	35·708	35¾	30·447	30½	17
18	50·994	51	41·816	41¾	35·008	35	29·777	29¾	18
19	50·241	50¼	41·097	41	34·322	34¼	29·122	29	19
20	49·498	49½	40·390	40½	33·649	33¾	28·481	28½	20
21	48·767	48¾	39·695	39¾	32·989	33	27·854	27¾	21
22	48·046	48	39·013	39	32·342	32¼	27·241	27¼	22
23	47·336	47¼	38·342	38¼	31·708	31¾	26·642	26¾	23
24	46·636	46½	37·682	37¾	31·086	31	26·055	26	24
25	45·947	46	37·034	37	30·477	30½	25·482	25½	25
26	45·268	45¼	36·397	36½	29·879	30	24·921	25	26
27	44·599	44½	35·771	35¾	29·293	29¼	24·373	24¼	27
28	43·940	44	35·156	35¼	28·719	28¾	23·837	23¾	28
29	43·291	43¼	34·551	34½	28·156	28¼	23·312	23¼	29
30	42·651	42¾	33·957	34	27·604	27½	22·799	22¾	30
31	42·021	42	33·373	33¼	27·062	27	22·297	22¼	31
32	41·400	41½	32·799	32¾	26·532	26½	21·807	21¾	32
33	40·788	40¾	32·235	32¼	26·011	26	21·327	21¼	33
34	40·185	40¼	31·680	31¾	25·501	25½	20·858	20¾	34
35	39·591	39½	31·136	31¼	25·001	25	20·399	20½	35
36	39·006	39	30·600	30½	24·511	24½	19·950	20	36
37	38·430	38½	30·074	30	24·031	24	19·511	19½	37
38	37·862	37¾	29·557	29½	23·559	23½	19·081	19	38
39	37·302	37¼	29·048	29	23·097	23	18·662	18¾	39
40	36·751	36¾	28·549	28½	22·645	22¾	18·251	18¼	40
41	36·208	36¼	28·058	28	22·201	22¼	17·849	17¾	41
42	35·673	35¾	27·575	27½	21·765	21¾	17·457	17½	42
43	35·145	35¼	27·101	27	21·338	21¼	17·072	17	43
44	34·626	34½	26·635	26¾	20·920	21	16·697	16¾	44
45	34·114	34	26·177	26¼	20·510	20½	16·329	16¼	45
46	33·610	33½	25·726	25¾	20·108	20	15·970	16	46
47	33·113	33	25·284	25¼	19·713	19¾	15·619	15½	47
48	32·624	32½	24·849	24¾	19·327	19¼	15·275	15¼	48
49	32·142	32¼	24·422	24½	18·948	19	14·939	15	49
50	31·667	31¾	24·002	24	18·576	18½	14·610	14½	50

EXAMPLES.—The perpetuity of an annuity of £1 per annum after 14 years is worth in present money : At 1½ per cent., £54·123 or 54 years' purchase ; at 2 per cent., £37·894 or 38 years' purchase.

INTEREST TABLES

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase 2½%		Years' Purchase 2¾%		Years' Purchase 3%		Years' Purchase 3½%		After Years
1	39·024	39	35·390	35½	32·362	32¼	27·605	27½	1
2	38·073	38	34·443	34½	31·420	31½	26·672	26¾	2
3	37·144	37¼	33·521	33½	30·505	30½	25·770	25¾	3
4	36·238	36¼	32·624	32½	29·616	29½	24·898	25	4
5	35·354	35¼	31·751	31¾	28·754	28¾	24·056	24	5
6	34·492	34½	30·901	31	27·916	28	23·243	23¼	6
7	33·651	33¾	30·074	30	27·103	27	22·457	22½	7
8	32·830	32¾	29·269	29¼	26·314	26½	21·697	21¾	8
9	32·029	32	28·486	28½	25·547	25½	20·964	21	9
10	31·248	31¼	27·724	27¾	24·803	24¾	20·255	20¼	10
11	30·486	30½	26·982	27	24·081	24	19·570	19½	11
12	29·742	29¾	26·259	26¼	23·379	23½	18·908	19	12
13	29·017	29	25·557	25½	22·697	22¾	18·269	18¼	13
14	28·309	28¼	24·873	24¾	22·037	22	17·651	17¾	14
15	27·619	27½	24·207	24¼	21·395	21½	17·054	17	15
16	26·945	27	23·559	23½	20·772	20¾	16·477	16½	16
17	26·288	26¼	22·929	23	20·167	20¼	15·920	16	17
18	25·647	25¾	22·315	22¼	19·580	19½	15·382	15½	18
19	25·021	25	21·718	21¾	19·010	19	14·862	14¾	19
20	24·411	24½	21·136	21¼	18·456	18½	14·359	14¼	20
21	23·815	23¾	20·571	20½	17·918	18	13·873	13¾	21
22	23·235	23¼	20·020	20	17·396	17½	13·404	13½	22
23	22·668	22¾	19·484	19½	16·890	17	12·951	13	23
24	22·115	22	18·963	19	16·398	16½	12·513	12½	24
25	21·576	21½	18·455	18½	15·920	16	12·090	12	25
26	21·049	21	17·961	18	15·456	15½	11·681	11¾	26
27	20·536	20½	17·481	17½	15·006	15	11·286	11¼	27
28	20·035	20	17·013	17	14·569	14½	10·904	11	28
29	19·546	19½	16·557	16½	14·145	14¼	10·536	10½	29
30	19·070	19	16·114	16	13·733	13¾	10·179	10¼	30
31	18·605	18½	15·683	15¾	13·333	13¼	9·835	9¾	31
32	18·151	18¼	15·263	15¼	12·945	13	9·503	9½	32
33	17·708	17¾	14·855	14¾	12·568	12½	9·181	9¼	33
34	17·276	17¼	14·457	14½	12·201	12¼	8·871	8¾	34
35	16·855	16¾	14·070	14	11·846	11¾	8·571	8½	35
36	16·444	16½	13·694	13¾	11·501	11½	8·281	8¼	36
37	16·043	16	13·327	13¼	11·166	11¼	8·001	8	37
38	15·651	15¾	12·971	13	10·841	10¾	7·730	7¾	38
39	15·270	15¼	12·623	12½	10·525	10½	7·469	7½	39
40	14·897	15	12·286	12¼	10·219	10¼	7·216	7¼	40
41	14·534	14½	11·957	12	9·921	10	6·972	7	41
42	14·179	14¼	11·637	11¾	9·632	9¾	6·737	6¾	42
43	13·834	13¾	11·325	11¼	9·351	9¼	6·509	6½	43
44	13·496	13½	11·022	11	9·079	9	6·289	6¼	44
45	13·167	13¼	10·727	10¾	8·815	8¾	6·076	6	45
46	12·846	12¾	10·440	10½	8·558	8½	5·871	5⅞	46
47	12·533	12½	10·161	10¼	8·309	8¼	5·672	5¾	47
48	12·227	12¼	9·889	10	8·067	8	5·480	5½	48
49	11·929	12	9·624	9½	7·832	7¾	5·295	5¼	49
50	11·638	11¾	9·366	9¼	7·604	7½	5·116	5	50

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase	1½ %	Years' Purchase	1¾ %	Years' Purchase	2 %	Years' Purchase	2¼ %	After Years
51	31·199	31¼	23·589	23⅔	18·212	18¼	14·289	14¼	51
52	30·738	30¾	23·183	23¼	17·855	17⅞	13·974	14	52
53	30·284	30¼	22·784	22¾	17·505	17½	13·667	13¾	53
54	29·836	29¾	22·393	22⅖	17·162	17⅙	13·366	13¼	54
55	29·395	29½	22·007	22	16·825	16⅚	13·072	13	55
56	28·961	29	21·629	21⅝	16·495	16½	12·784	12¾	56
57	28·533	28½	21·257	21¼	16·172	16⅙	12·503	12½	57
58	28·111	28	20·891	21	15·855	15⅚	12·228	12¼	58
59	27·696	27¾	20·532	20½	15·544	15½	11·959	12	59
60	27·286	27¼	20·179	20¼	15·239	15¼	11·695	11¾	60
61	26·883	27	19·832	19¾	14·940	15	11·438	11½	61
62	26·486	26½	19·491	19½	14·647	14¾	11·186	11¼	62
63	26·094	26	19·156	19	14·360	14¼	10·940	11	63
64	25·709	25¾	18·826	18⅚	14·079	14	10·700	10¾	64
65	25·329	25¼	18·502	18½	13·803	13¾	10·464	10½	65
66	24·955	25	18·184	18⅙	13·532	13½	10·234	10¼	66
67	24·586	24½	17·871	17¾	13·267	13¼	10·009	10	67
68	24·222	24¼	17·564	17⅗	13·006	13	9·788	9¾	68
69	23·864	23¾	17·262	17¼	12·751	12¾	9·573	9½	69
70	23·512	23½	16·965	17	12·501	12½	9·362	9¼	70
71	23·164	23¼	16·673	16⅝	12·256	12¼	9·156	9¼	71
72	22·822	22¾	16·386	16½	12·016	12	8·955	9	72
73	22·485	22½	16·105	16	11·780	11¾	8·758	8¾	73
74	22·152	22¼	15·828	15¾	11·549	11½	8·565	8½	74
75	21·825	21¾	15·555	15½	11·323	11¼	8·377	8½	75
76	21·503	21½	15·288	15¼	11·101	11	8·192	8¼	76
77	21·185	21¼	15·025	15	10·883	11	8·012	8	77
78	20·872	20¾	14·766	14¾	10·670	10¾	7·836	7¾	78
79	20·563	20½	14·513	14½	10·461	10½	7·663	7¾	79
80	20·259	20¼	14·263	14¼	10·255	10¼	7·495	7½	80
85	18·806	18¾	13·078	13	9·289	9¼	6·706	6¾	85
90	17·457	17½	11·991	12	8·413	8⅜	6·000	6	90
95	16·204	16¼	10·995	11	7·620	7¾	5·368	5¼	95
100	15·042	15	10·081	10	6·902	7	4·803	4¾	100

EXAMPLES.—The perpetuity of an annuity of £1 per annum after 65 years is worth in present money : at 1¾ per cent. £18·502, or 18½ years' purchase; at 2¼ per cent. £10·464, or 10½ years' purchase.

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase 2½%		Years' Purchase 2¾%		Years' Purchase 3%		Years' Purchase 3½%		After Years
51	11·354	11¼	9·116	9	7·382	7½	4·943	5	51
52	11·077	11	8·872	8¾	7·167	7¼	4·776	4¾	52
53	10·807	10¾	8·634	8½	6·958	7	4·614	4½	53
54	10·543	10½	8·403	8½	6·756	6¾	4·458	4½	54
55	10·286	10¼	8·178	8¼	6·559	6½	4·307	4¼	55
56	10·035	10	7·959	8	6·368	6¼	4·162	4¼	56
57	9·790	9¾	7·746	7¾	6·182	6¼	4·021	4	57
58	9·552	9½	7·539	7½	6·002	6	3·885	4	58
59	9·319	9¼	7·337	7¼	5·828	5¾	3·754	3¾	59
60	9·091	9	7·141	7¼	5·658	5¾	3·627	3¾	60
61	8·870	8¾	6·950	7	5·493	5½	3·504	3½	61
62	8·653	8½	6·764	6¾	5·333	5¼	3·386	3½	62
63	8·442	8½	6·583	6½	5·178	5¼	3·271	3¼	63
64	8·236	8¼	6·407	6½	5·027	5	3·160	3¼	64
65	8·035	8	6·235	6¼	4·880	5	3·054	3	65
66	7·839	7¾	6·068	6	4·738	4¾	2·950	3	66
67	7·648	7¾	5·906	6	4·600	4½	2·851	2¾	67
68	7·462	7½	5·748	5¾	4·466	4½	2·754	2¾	68
69	7·280	7¼	5·594	5½	4·336	4¼	2·661	2¾	69
70	7·102	7	5·444	5½	4·210	4¼	2·571	2½	70
71	6·929	7	5·299	5¼	4·087	4	2·484	2½	71
72	6·760	6¾	5·157	5¼	3·968	4	2·400	2½	72
73	6·595	6½	5·019	5	3·853	3¾	2·319	2¼	73
74	6·434	6½	4·884	5	3·740	3¾	2·241	2¼	74
75	6·277	6¼	4·754	4¾	3·632	3¾	2·165	2¼	75
76	6·124	6	4·626	4¾	3·526	3½	2·092	2	76
77	5·975	6	4·503	4½	3·423	3½	2·021	2	77
78	5·829	5¾	4·382	4½	3·233	3¼	1·952	2	78
79	5·687	5¾	4·265	4¼	3·227	3¼	1·886	2	79
80	5·548	5½	4·151	4¼	3·133	3¼	1·823	1¾	80
85	4·904	5	3·624	3½	2·702	2¾	1·535	1½	85
90	4·334	4¼	3·164	3¼	2·331	2¼	1·292	1¼	90
95	3·831	3¾	2·763	2¾	2·011	2	1·088	1	95
100	3·386	3½	2·413	2½	1·734	1¾	·916	1	100

After Years	Years' Purchase 4 %		Years' Purchase 4½ %		Years' Purchase 5 %		Years' Purchase 6 %		After Years
1	24·038	24	21·265	21¼	19·048	19	15·723	15¾	1
2	23·114	23	20·350	20¼	18·141	18½	14·833	14¾	2
3	22·225	22¼	19·473	19½	17·277	17¼	13·994	14	3
4	21·370	21¼	18·635	18¾	16·454	16½	13·202	13¼	4
5	20·548	20½	17·832	17¾	15·671	15¾	12·454	12½	5
6	19·758	19¾	17·064	17	14·924	15	11·749	11¾	6
7	18·998	19	16·330	16¼	14·214	14¼	11·084	11	7
8	18·267	18¼	15·626	15¾	13·537	13½	10·457	10½	8
9	17·565	17½	14·953	15	12·892	13	9·865	9¾	9
10	16·889	17	14·310	14¼	12·278	12¼	9·307	9¼	10
11	16·240	16¼	13·693	13¾	11·694	11¾	8·780	8¾	11
12	15·615	15½	13·104	13	11·137	11¼	8·283	8¼	12
13	15·014	15	12·539	12½	10·606	10½	7·814	7¾	13
14	14·437	14½	11·999	12	10·101	10	7·372	7¼	14
15	13·882	14	11·483	11½	9·620	9½	6·954	7	15
16	13·348	13¼	10·988	11	9·162	9¼	6·561	6½	16
17	12·834	12¾	10·515	10½	8·726	8¾	6·189	6¼	17
18	12·341	12¼	10·062	10	8·310	8¼	5·839	5¾	18
19	11·866	11¾	9·629	9¾	7·915	8	5·509	5½	19
20	11·410	11½	9·214	9¼	7·538	7½	5·197	5¼	20
21	10·971	11	8·818	8¾	7·179	7¼	4·903	5	21
22	10·549	10½	8·438	8½	6·837	6¾	4·625	4¾	22
23	10·143	10¼	8·074	8	6·511	6½	4·363	4¼	23
24	9·753	9¾	7·727	7¾	6·201	6¼	4·116	4	24
25	9·378	9½	7·394	7½	5·906	6	3·883	3¾	25
26	9·017	9	7·076	7	5·625	5¾	3·663	3¾	26
27	8·670	8¾	6·771	6¾	5·357	5¼	3·456	3½	27
28	8·337	8¼	6·479	6½	5·102	5	3·261	3¼	28
29	8·016	8	6·200	6¼	4·859	4¾	3·076	3	29
30	7·708	7¾	5·933	6	4·628	4¾	2·902	3	30
31	7·412	7½	5·678	5¾	4·407	4½	2·738	2¾	31
32	7·126	7¼	5·433	5½	4·197	4¼	2·583	2½	32
33	6·852	6¾	5·199	5¼	3·997	4	2·436	2½	33
34	6·589	6½	4·975	5	3·807	3¾	2·299	2¼	34
35	6·335	6¼	4·761	4¾	3·626	3¾	2·168	2¼	35
36	6·092	6	4·556	4½	3·453	3½	2·046	2	36
37	5·857	5¾	4·360	4¼	3·289	3¼	1·930	2	37
38	5·632	5½	4·172	4¼	3·132	3¼	1·821	1¾	38
39	5·416	5½	3·993	4	2·983	3	1·718	1¾	39
40	5·207	5¼	3·821	3¾	2·841	2¾	1·620	1½	40
41	5·007	5	3·656	3¾	2·706	2¾	1·529	1½	41
42	4·814	4¾	3·499	3½	2·577	2½	1·442	1½	42
43	4·629	4½	3·348	3¼	2·454	2½	1·360	1¼	43
44	4·451	4½	3·204	3¼	2·337	2¼	1·283	1¼	44
45	4·280	4¼	3·066	3	2·226	2¼	1·211	1¼	45
46	4·115	4	2·934	3	2·120	2	1·142	1¼	46
47	3·957	4	2·808	2¾	2·019	2	1·078	1	47
48	3·805	3¾	2·687	2¾	1·923	2	1·017	1	48
49	3·659	3¾	2·571	2½	1·831	1¾	·959	1	49
50	3·518	3½	2·460	2½	1·744	1¾	·905	1	50

The Present Value of the **REVERSION OF A PERPETUITY** after any given Term not exceeding 100 Years

EXAMPLES.—The perpetuity of an annuity of £1 per annum after 37 years is worth in present money: at 4 per cent., £5·857, or 5¾ years' purchase; at 5 per cent., £3·289, or 3¼ years' purchase.

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase	7%	Years' Purchase	8%	Years' Purchase	9%	Years' Purchase	10%	After Years
1	13·351	13¼	11·574	11½	10·194	10¼	9·091	9	1
2	12·477	12½	10·717	10¾	9·352	9¼	8·264	8¼	2
3	11·661	11¾	9·923	10	8·580	8½	7·513	7½	3
4	10·898	11	9·188	9¼	7·872	7¾	6·830	6¾	4
5	10·185	10¼	8·507	8½	7·222	7¼	6·210	6¼	5
6	9·519	9½	7·877	7¾	6·626	6¾	5·645	5¾	6
7	8·896	9	7·294	7¼	6·078	6	5·132	5¼	7
8	8·314	8¼	6·753	6¾	5·577	5½	4·665	4¾	8
9	7·770	7¾	6·253	6¼	5·116	5	4·241	4¼	9
10	7·262	7¼	5·790	5¾	4·694	4¾	3·855	3¾	10
11	6·787	6¾	5·361	5¼	4·306	4¼	3·505	3½	11
12	6·343	6¼	4·964	5	3·951	4	3·186	3¼	12
13	5·928	6	4·596	4½	3·625	3½	2·897	3	13
14	5·540	5½	4·256	4¼	3·325	3¼	2·633	2¾	14
15	5·178	5¼	3·940	4	3·051	3	2·394	2½	15
16	4·839	4¾	3·649	3¾	2·799	2¾	2·176	2¼	16
17	4·522	4½	3·378	3½	2·568	2½	1·978	2	17
18	4·226	4¼	3·128	3¼	2·356	2¼	1·799	1¾	18
19	3·950	4	2·896	3	2·161	2¼	1·635	1¾	19
20	3·691	3¾	2·682	2¾	1·983	2	1·486	1½	20
21	3·450	3½	2·483	2½	1·819	1¾	1·351	1¼	21
22	3·224	3¼	2·299	2¼	1·669	1¾	1·229	1¼	22
23	3·013	3	2·129	2¼	1·531	1½	1·117	1	23
24	2·816	2¾	1·971	2	1·405	1½	1·015	1	24
25	2·632	2¾	1·825	1¾	1·289	1¼	·920	1	25
26	2·460	2½	1·690	1¾	1·182	1¼	·839	¾	26
27	2·299	2¼	1·565	1½	1·085	1	·763	¾	27
28	2·148	2¼	1·449	1½	1·005	1	·693	¾	28
29	2·008	2	1·342	1¼	·913	1	·630	¾	29
30	1·876	2	1·242	1¼	·838	¾	·573	½	30
31	1·754	1¾	1·150	1¼	·769	¾	·521	½	31
32	1·639	1¾	1·065	1	·705	¾	·474	½	32
33	1·532	1½	·986	1	·647	¾	·431	½	33
34	1·431	1½	·913	1	·594	½	·391	⅓	34
35	1·338	1¼	·845	¾	·545	½	·356	⅓	35
36	1·250	1¼	·783	¾	·500	½	·323	⅓	36
37	1·168	1¼	·725	¾	·458	½	·294	¼	37
38	1·092	1	·671	¾	·421	½	·267	¼	38
39	1·021	1	·621	½	·386	⅓	·243	¼	39
40	·954	1	·575	½	·354	⅓	·221	⅕	40
41	·891	1	·533	½	·325	⅓	·201	⅕	41
42	·833	¾	·493	½	·298	⅓	·183	⅙	42
43	·778	¾	·457	½	·273	¼	·166	⅙	43
44	·728	¾	·423	½	·251	¼	·151	⅐	44
45	·680	¾	·392	½	·230	¼	·137	⅐	45
46	·635	¾	·363	⅓	·211	⅕	·125	⅛	46
47	·594	½	·336	⅓	·194	⅕	·113	⅑	47
48	·555	½	·311	⅓	·178	⅙	·103	1/10	48
49	·519	½	·288	¼	·163	⅙	·094	1/11	49
50	·485	½	·267	¼	·150	⅐	·085	1/12	50

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase 4 %		Years' Purchase 4½ %		Years' Purchase 5 %		Years' Purchase 6 %		After Years
51	3·383	3½	2·354	2¼	1·661	1¾	·854	¾	51
52	3·253	3¼	2·253	2¼	1·582	1½	·806	¾	52
53	3·128	3¼	2·156	2¼	1·507	1½	·760	¾	53
54	3·007	3	2·063	2	1·435	1½	·717	¾	54
55	2·892	3	1·974	2	1·367	1¼	·677	¾	55
56	2·781	2¾	1·889	2	1·302	1¼	·639	⅝	56
57	2·674	2¾	1·808	1¾	1·240	1¼	·603	⅝	57
58	2·571	2½	1·730	1¾	1·181	1¼	·568	⅝	58
59	2·472	2½	1·655	1¾	1·125	1	·536	½	59
60	2·377	2½	1·584	1½	1·071	1	·506	½	60
61	2·285	2¼	1·516	1½	1·020	1	·477	½	61
62	2·197	2¼	1·451	1½	·971	1	·450	½	62
63	2·113	2	1·388	1½	·925	1	·424	½	63
64	2·031	2	1·328	1¼	·881	1	·400	⅖	64
65	1·953	2	1·271	1¼	·839	¾	·378	⅓	65
66	1·878	2	1·217	1¼	·799	¾	·356	⅓	66
67	1·806	1¾	1·164	1¼	·761	¾	·336	⅓	67
68	1·736	1¾	1·114	1	·725	¾	·317	⅓	68
69	1·670	1¾	1·066	1	·690	¾	·299	⅓	69
70	1·605	1½	1·020	1	·657	¾	·282	¼	70
71	1·544	1½	·976	1	·626	¾	·266	¼	71
72	1·484	1½	·934	1	·596	½	·255	¼	72
73	1·427	1½	·894	1	·568	½	·237	¼	73
74	1·372	1¼	·855	¾	·541	½	·223	¼	74
75	1·320	1¼	·819	¾	·515	½	·211	⅕	75
76	1·269	1¼	·783	¾	·491	½	·199	⅕	76
77	1·220	1¼	·750	¾	·467	½	·188	⅕	77
78	1·173	1¼	·717	¾	·445	½	·177	⅙	78
79	1·128	1¼	·686	¾	·424	½	·167	⅙	79
80	1·085	1	·657	¾	·404	½	·158	⅙	80
85	·891	1	·527	½	·316	⅓	·118	⅛	85
90	·733	¾	·423	½	·248	¼	·088	1/11	90
95	·602	⅗	·339	⅓	·194	⅕	·066	1/15	95
100	·495	½	·272	¼	·152	1/7	·049	1/20	100

EXAMPLES.—The perpetuity of an annuity of £1 per annum after 65 years is worth in present money : at 4 per cent., £1·953, or 2 years' purchase ; at 4½ per cent., £1·271, or 1¼ years' purchase.

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase 7 %		Years' Purchase 8 %		Years' Purchase 9 %		Years' Purchase 10 %		After Years
51	·453	$\frac{1}{2}$	·247	$\frac{1}{4}$	·137	$\frac{1}{7}$	·078	$\frac{1}{13}$	51
52	·423	$\frac{1}{2}$	·229	$\frac{1}{4}$	·126	$\frac{1}{8}$	·071	$\frac{1}{14}$	52
53	·396	$\frac{1}{2}$	·212	$\frac{1}{5}$	·116	$\frac{1}{8}$	·064	$\frac{1}{16}$	53
54	·370	$\frac{1}{3}$	·196	$\frac{1}{5}$	·106	$\frac{1}{9}$	·059	$\frac{1}{17}$	54
55	·346	$\frac{1}{3}$	·182	$\frac{1}{5}$	·097	$\frac{1}{10}$	·053	$\frac{1}{19}$	55
56	·323	$\frac{1}{3}$	·168	$\frac{1}{6}$	·089	$\frac{1}{11}$	·049	$\frac{1}{20}$	56
57	·302	$\frac{1}{4}$	·156	$\frac{1}{6}$	·082	$\frac{1}{12}$	·044	$\frac{1}{23}$	57
58	·282	$\frac{1}{4}$	·144	$\frac{1}{7}$	·075	$\frac{1}{13}$	·040	$\frac{1}{25}$	58
59	·264	$\frac{1}{4}$	·134	$\frac{1}{7}$	·069	$\frac{1}{14}$	·037	$\frac{1}{27}$	59
60	·246	$\frac{1}{4}$	·124	$\frac{1}{8}$	·063	$\frac{1}{16}$	·033	$\frac{1}{30}$	60
61	·230	$\frac{1}{4}$	·114	$\frac{1}{9}$	·058	$\frac{1}{17}$	·030	$\frac{1}{33}$	61
62	·215	$\frac{1}{5}$	·106	$\frac{1}{9}$	·053	$\frac{1}{19}$	·027	$\frac{1}{37}$	62
63	·201	$\frac{1}{5}$	·098	$\frac{1}{10}$	·049	$\frac{1}{20}$	·025	$\frac{1}{40}$	63
64	·188	$\frac{1}{5}$	·091	$\frac{1}{11}$	·045	$\frac{1}{22}$	·022	$\frac{1}{45}$	64
65	·176	$\frac{1}{6}$	·084	$\frac{1}{12}$	·041	$\frac{1}{24}$	·020	$\frac{1}{50}$	65
66	·164	$\frac{1}{6}$	·078	$\frac{1}{13}$	·038	$\frac{1}{26}$	·019	$\frac{1}{53}$	66
67	·154	$\frac{1}{6}$	·072	$\frac{1}{14}$	·035	$\frac{1}{29}$	·017	$\frac{1}{59}$	67
68	·143	$\frac{1}{7}$	·067	$\frac{1}{15}$	·032	$\frac{1}{31}$	·015	$\frac{1}{67}$	68
69	·134	$\frac{1}{7}$	·062	$\frac{1}{16}$	·029	$\frac{1}{34}$	·014	$\frac{1}{71}$	69
70	·125	$\frac{1}{8}$	·057	$\frac{1}{18}$	·027	$\frac{1}{37}$	·013	$\frac{1}{77}$	70
71	·117	$\frac{1}{8}$	·053	$\frac{1}{19}$	·024	$\frac{1}{42}$	·012	$\frac{1}{83}$	71
72	·109	$\frac{1}{9}$	·049	$\frac{1}{20}$	·022	$\frac{1}{45}$	·010	$\frac{1}{100}$	72
73	·102	$\frac{1}{10}$	·045	$\frac{1}{22}$	·021	$\frac{1}{48}$	·010	$\frac{1}{100}$	73
74	·096	$\frac{1}{10}$	·042	$\frac{1}{24}$	·019	$\frac{1}{53}$	·009	$\frac{1}{111}$	74
75	·089	$\frac{1}{11}$	·039	$\frac{1}{26}$	·017	$\frac{1}{59}$	·008	$\frac{1}{125}$	75
76	·084	$\frac{1}{12}$	·036	$\frac{1}{28}$	·016	$\frac{1}{62}$	·007	$\frac{1}{143}$	76
77	·078	$\frac{1}{13}$	·033	$\frac{1}{30}$	·015	$\frac{1}{67}$	·006	$\frac{1}{167}$	77
78	·073	$\frac{1}{14}$	·031	$\frac{1}{32}$	·013	$\frac{1}{77}$	·006	$\frac{1}{167}$	78
79	·068	$\frac{1}{15}$	·029	$\frac{1}{34}$	·012	$\frac{1}{83}$	·005	$\frac{1}{200}$	79
80	·064	$\frac{1}{16}$	·026	$\frac{1}{38}$	·011	$\frac{1}{91}$	·005	$\frac{1}{200}$	80
85	·045	$\frac{1}{22}$	·018	$\frac{1}{56}$	·007	$\frac{1}{143}$	·003	$\frac{1}{333}$	85
90	·032	$\frac{1}{31}$	·012	$\frac{1}{83}$	·005	$\frac{1}{200}$	·002	$\frac{1}{500}$	90
95	·023	$\frac{1}{43}$	·008	$\frac{1}{125}$	·003	$\frac{1}{338}$	·001	$\frac{1}{1000}$	95
100	·016	$\frac{1}{62}$	·006	$\frac{1}{167}$	·002	$\frac{1}{500}$	·001	$\frac{1}{1000}$	100

Years	PRESENT VALUE OF		Years	PRESENT VALUE OF	
	One Pound	£1 per Annum		One Pound	£1 per Annum
1	·8695652	·8695652	51	·0008024	6·6613171
2	·7561437	1·6257089	52	·0006978	6·6620149
3	·6575162	2·2832251	53	·0006068	6·6626216
4	·5717532	2·8549784	54	·0005276	6·6631492
5	·4971767	3·3521551	55	·0004588	6·6636080
6	·4323276	3·7844827	56	·0003990	6·6640070
7	·3759370	4·1604197	57	·0003469	6·6643539
8	·3269018	4·4873215	58	·0003017	6·6646556
9	·2842624	4·7715839	59	·0002623	6·6649179
10	·2471847	5·0187686	60	·0002281	6·6651460
11	·2149432	5·2337118	61	·0001983	6·6653443
12	·1869072	5·4206190	62	·0001725	6·6655168
13	·1625280	5·5831470	63	·0001500	6·6656668
14	·1413287	5·7244756	64	·0001304	6·6657972
15	·1228945	5·8473701	65	·0001134	6·6659106
16	·1068648	5·9542349	66	·0000986	6·6660092
17	·0929259	6·0471608	67	·0000858	6·6660950
18	·0808051	6·1279659	68	·0000746	6·6661696
19	·0702653	6·1982312	69	·0000648	6·6662344
20	·0611003	6·2593315	70	·0000564	6·6662908
21	·0531307	6·3124622	71	·0000490	6·6663398
22	·0462006	6·3586627	72	·0000426	6·6663824
23	·0401744	6·3988372	73	·0000371	6·6664195
24	·0349343	6·4337714	74	·0000322	6·6664518
25	·0303776	6·4641491	75	·0000280	6·6664798
26	·0264153	6·4905644	76	·0000244	6·6665042
27	·0229699	6·5135343	77	·0000212	6·6665254
28	·0199738	6·5335081	78	·0000184	6·6665438
29	·0173685	6·5508766	79	·0000160	6·6665598
30	·0151031	6·5659796	80	·0000139	6·6665738
31	·0131331	6·5791127	81	·0000121	6·6665859
32	·0114201	6·5905328	82	·0000105	6·6665964
33	·0099305	6·6004633	83	·0000092	6·6666056
34	·0086352	6·6090985	84	·0000080	6·6666135
35	·0075089	6·6166074	85	·0000069	6·6666205
36	·0065295	6·6231369	86	·0000060	6·6666265
37	·0056778	6·6288147	87	·0000052	6·6666317
38	·0049372	6·6337519	88	·0000046	6·6666363
39	·0042932	6·6380451	89	·0000040	6·6666403
40	·0037332	6·6417784	90	·0000034	6·6666437
41	·0032463	6·6450247	91	·0000030	6·6666467
42	·0028229	6·6478475	92	·0000026	6·6666493
43	·0024547	6·6503022	93	·0000023	6·6666516
44	·0021345	6·6524367	94	·0000020	6·6666535
45	·0018561	6·6542928	95	·0000017	6·6666552
46	·0016140	6·6559068	96	·0000015	6·6666567
47	·0014035	6·6573102	97	·0000013	6·6666580
48	·0012204	6·6585306	98	·0000011	6·6666592
49	·0010612	6·6595919	99	·0000010	6·6666601
50	·0009228	6·6605147	100	·0000009	6·6666610

For explanation see pp. xviii, 10, 12

INTRODUCTION

ON THE NATURE AND USE OF DECIMALS

In order to render the following tables intelligible to persons only moderately acquainted with common arithmetic it may be well to give a brief explanation of decimals, since most of the tables here given involve their use.

Our entire system of numbering (if for the moment we leave fractions out of consideration) is, in fact, the *decimal* system, which means literally a system of *tens*, for if any number consist of a single figure—say, 6—we call that number *six*—that is, six *units* or six *ones*—but if another figure—a 4, for instance—stand before it, making the number 46, we do not call this 4 four *ones*, but four *tens*, and thus regard the number as forty-six. In like manner if another figure—3, for instance—be prefixed making the number 346, we regard this 3 not as three *ones*, nor as three *tens*, but as three *hundreds*. In this way we give to every figure in a number ten times the value the same figure would have if it were moved one place more to the right ; so that *the value of a figure depends upon its position.* When we are dealing with whole numbers the figure occupying the first place on the right denotes so many *ones*, the next figure so many *tens*, the next so many *hundreds*, and so on. This tenfold increase of value which every advance towards the left gives to a figure is properly called the *decimal* system of notation.

Now what are more particularly called *decimals* are numbers that are less than unity, and they are dealt with on exactly the same principle as numbers that are more than unity, a decimal dot being placed to indicate what numbers are more than unity and what numbers are less than unity. Whether we are dealing with numbers greater or less than unity the value of a figure is ten times as much as the value of the same figure placed next to it on the right-hand side and one tenth as much as the value of the same figure placed

a

next to it on the left-hand side. It is, therefore, just as simple to deal with decimals as it is to deal with whole numbers.

If we see a number, such as 346, without any decimal dot we understand, as explained above, that the 6 stands for six *ones*, but if between the four and the six we place a decimal dot, 34·6, we then know that the four no longer stands for four *tens*, but for four *ones*, and the 6 no longer stands for six *ones*, but for six *tenths of one*. So if we write 3·46 the 3 no longer stands for three *hundreds*, but for three *ones*, the 4 for *four tenths* of one, and the 6 for *six hundredths* of one. The decimal dot, therefore, is simply employed to tell us where the *ones* come, for the figure immediately to the left of the decimal dot always stands for so many *ones*. If these uniform gradations by tens and tenths are kept in mind no difficulty will arise in dealing with the decimals.

Decimals and Fractions

From this it will be seen that any decimal may be converted into its equivalent fraction at once : we have only to write the decimal, removing the dot, for numerator, and to write for denominator 1 followed by as many cyphers as there are figures, or *places*, in the decimal. Thus :

$$ 0\cdot6 = \frac{6}{10} \; ; \quad \cdot06 = \frac{6}{100} \; ; \quad \cdot006 = \frac{6}{1000} \; ; \quad \cdot42 = \frac{42}{100} \; ; \quad \cdot423 = \frac{423}{1000}, $$

and so on.

Every fraction too of which the denominator 1 is followed by cyphers may just as readily be written as a decimal, thus

$$ \frac{3}{10} = \cdot3 \; ; \quad \frac{7}{100} = \cdot07 \; ; \quad \frac{9}{1000} = \cdot009 \; ; \quad \frac{2463}{100} = 24\cdot63, \&c. $$

We have only to write down the numerator and to point off from the right as many decimal places as there are cyphers in the denominator, supplying this necessary number of places by cyphers immediately after the decimal point, should the number of figures in the numerator be too few.

Fractions, whatever be their denominators, may also be converted into decimals, as will be seen presently.

Addition of Decimals

From what has been already said it will be seen that the important thing in the addition of decimals is to take care that the decimal dots all come under one another, just as in the addition of whole

numbers the units have to come under the units, the tens under the tens, and so on. If this point is attended to the matter is perfectly simple, and is conducted exactly like simple addition. A few examples are given below :—

1. Add together 2·345, ·64, 23·7, ·02.
2. 7·432, 16·207, ·021, ·4628.
3. ·005, 61·4, ·368, 7·2.

(1)	(2)	(3)
2·345	7·432	·005
·64	16·207	61·4
23·7	·021	·368
·02	·4628	7·2
26·705	24·1228	68·973

Subtraction of Decimals

In subtracting decimals, as in adding them, the important thing is to see that the decimal dots come under one another, and if this is done the subtraction of decimals is carried out in exactly the same way as simple subtraction. A few examples of subtraction are also given :—

1. Subtract 3·725 from 5·103.
2. 27·846 from 31·3.
3. ·026 from 12·4.

(1)	(2)	(3)
5·103	31·3	12·4
3·725	27·846	·026
1·378	3·454	12·374

In the third example of addition two cyphers appear immediately to the right of the decimal dot. These o's serve to indicate the *position*, and therefore the *value*, of the figure to the right of them ; thus ·005 indicates that there are no tenths nor hundredths, and that the five stands for five thousandths ; and similarly in the third example of subtraction ·026 indicates that there are no tenths, but that the 2 stands for two hundredths and the 6 for six thousandths.

Multiplication of Decimals

It will have already been seen that we multiply a number involving decimals by 10 by simply removing the decimal point one place to

the right ; we multiply by 100 by removing the point two places to the right, and so on. Thus :

$$·6 \times 10 = 6 \; ; \; ·6 \times 100 = 60 \; ; \; ·006 \times 100 = ·6.$$
$$·42 \times 10 = 4·2 \; ; \; ·42 \times 100 = 42 \; ; \; 4·2 \times 100 = 420.$$

In order to multiply a number containing decimals by any *whole* number—that is, by any number without decimals—we proceed exactly as we should do if there were no decimals at all ; only when the product is obtained we must point off, as decimals, as many places as there are places pointed off in the number multiplied. Thus, if we have to multiply 24·623 by 47, we proceed as in the margin, and so in all similar cases. As the number multiplied has three decimal places, we mark off three places of decimals in the product.

$$\begin{array}{r} 24·623 \\ 47 \\ \hline 172361 \\ 98492 \\ \hline 1157·281 \end{array}$$

If we have to multiply together two numbers which both contain decimals we proceed as in simple multiplication, and place the decimal dot in the answer in such a position that the number of decimals is the same in the answer as in the two numbers when their decimal places are added together. Thus :

$$1·2 \times 1·1 = 1·32 \; ; \; ·12 \times ·12 = ·0144 \; ;$$
$$·222 \times 3·1 = ·6882 \; ; \; ·033 \times ·22 = ·00726.$$

Division of Decimals

In dividing a number containing decimals by a whole number we place the decimal dot in the quotient as soon as we bring down a decimal of the dividend. Thus to divide 27·344 by 4 we proceed as follows :—

$$\begin{array}{r} 4 \overline{)27·344} \\ \hline 6·836 \end{array}$$

After dividing 27 by 4 we come to the decimal ·3, and so the decimal dot had to be placed between the 6 and 8 of the quotient.

If we have to divide by a number that will not go into the decimal part of the dividend we must be careful to record the fact by putting a cypher in the quotient.

Thus ·372 ÷ 4 gives

$$\begin{array}{r} 4 \overline{)·372} \\ \hline ·093 \end{array}$$

and 0372 ÷ 4 gives

$$\begin{array}{r} 4 \overline{)·0372} \\ \hline ·0093 \end{array}$$

(4)

The values of the 9 and the 3 depend on their *position*, and they must be put in their right place by prefixing cyphers to the left of them if necessary. Placing cyphers to the right of a decimal dot alters the value of the number. Placing cyphers to the right of a decimal number with no other number after the cyphers makes no difference in its value. With whole numbers it is just the opposite of this. Thus :

$$\cdot73=\frac{73}{100} ; \quad \cdot073=\frac{73}{1000} ; \quad \cdot0073=\frac{73}{10000} ; \quad \cdot730=\frac{730}{1000} \text{ or } \frac{73}{100} ;$$

These facts have to be borne in mind in the division of decimals. We may add as many cyphers as we please to the right of a decimal number, and so carry our division as far as we choose. Thus $4\cdot3 \div 7$ may just as well be called $4\cdot30000 \div 7$. It makes no difference in the value, but there is no need to actually write the cyphers in working out the sum. We may put

$$7)4\cdot3000000 \text{ or } 7)4\cdot3$$
$$\overline{\cdot6142857} \qquad \overline{\cdot6142857},$$

and the result is the same. The benefit of proceeding in this way is that we may get an answer that is more nearly correct than if we left off at the last figure of the dividend. Thus the result of $4\cdot3 \div 7$ is approximately $\frac{6}{10}$, more nearly $\frac{61}{100}$, still more nearly $\frac{614}{1000}$, and so on.

If both the divisor and the dividend contain decimals there must be as many decimal places in the divisor and quotient together as there are in the dividend. This is obvious from what has been said in regard to multiplication. It was there shown that $\cdot222 \times 3\cdot1 = \cdot6882$, and so if we have to divide $\cdot6882$ by $\cdot222$ we have

$$\cdot222)\cdot6882(3\cdot1$$
$$\underline{666}$$
$$222$$
$$\underline{222}$$

There are three decimal places in the divisor $\cdot222$, and four in the dividend $\cdot6882$, so there must be one in the quotient $3\cdot1$ to add to the three in the divisor to make up the four in the dividend.

In applying this rule it must be borne in mind that the number of decimal places in the dividend means the number actually used in division, and the number of cyphers added to it ranks as decimal places. Thus $8\cdot973 \div \cdot24 = 37\cdot3$ or $37\cdot38$ or $37\cdot387$ or $37\cdot3875$, as we may see.

$$\cdot24)8\cdot973000(37\cdot3875$$
$$\underline{72}$$
$$177$$
$$\underline{168}$$
$$93$$
$$\underline{72}$$
$$210$$
$$\underline{192}$$
$$180$$
$$\underline{168}$$
$$120$$
$$\underline{120}$$

There are one, or two, or three, or four places of decimals in the answer, depending upon the extent to which we carry the division. Obviously the answer cannot sometimes be $37\cdot3\left(i.e.\ 37\frac{3}{10}\right)$, sometimes $3\cdot73\left(i.e.\ 3\frac{73}{100}\right)$, and so on : it must always be 37 and a little more. Hence the number of decimal places *used in the dividend* have to be noted, and the number in the quotient added to those in the divisor must make up the number used in the dividend.

Some examples of division are appended.

$$(1)\ 44\cdot406\div12 \qquad (2)\ 44\cdot406\div\cdot12 \qquad (3)\ \cdot44406\div1\cdot2$$
$$12)44\cdot406 \qquad\qquad \cdot12)44\cdot4060 \qquad\qquad 1\cdot2)\cdot444060$$
$$\underline{3\cdot7005} \qquad\qquad\quad \underline{370\cdot05} \qquad\qquad\quad \underline{\cdot37005}$$

$$(4)\ 89\cdot648\div347\cdot3$$
$$347\cdot3)89\cdot64800000(\cdot2581284$$
$$\underline{6946}$$
$$20188$$
$$\underline{17365}$$
$$28230$$
$$\underline{27784}$$
$$4460$$
$$\underline{3473}$$
$$9870$$
$$\underline{6946}$$
$$29240$$
$$\underline{27784}$$
$$14560$$
$$\underline{13892}$$
$$668$$

(6)

For most of the purposes for which the tables in this book are likely to be used four or five places of decimals is amply sufficient, and it is unnecessary to carry the calculations any further.

Fractions and Decimals

We have already shown how readily decimals may be converted into fractions, and we must now show how fractions may be converted into decimals. We saw that a decimal may be thought of as a fraction with the decimal as numerator, and for denominator 1 followed by as many cyphers as there are decimal places in the decimal. Thus $\cdot 1 = \frac{1}{10}$; $\cdot 23 = \frac{23}{100}$, and so on. Now it is obvious we do not alter the value of any fraction if we multiply both the numerator and denominator by the same quantity. Thus $\frac{1}{2} = \frac{2}{4} = \frac{4}{8} = \frac{8}{16} = \frac{16}{32}$, and so on. All these fractions are of the same value.

If, therefore, we multiply the denominator by a quantity that makes it equal to 10 or 100, or any other multiple of 10, and then multiply the numerator by the same quantity as we multiplied the denominator by, we at once get a fraction that can be converted into a decimal at sight.

Thus

$$\frac{1}{2} = \frac{5}{10} = \cdot 5$$

$$\frac{1}{4} = \frac{25}{100} = \cdot 25$$

$$\frac{2}{5} = \frac{4}{10} = \cdot 4$$

It is often, however, a clumsy way of working to divide 10 or some power of 10 by the denominator, and then multiply the numerator by the result. To do so may involve a long multiplication sum. We therefore multiply the numerator by 1 followed by any number of cyphers we want and divide by the denominator. In other words, we divide the numerator by the denominator. Thus in converting $\frac{2}{5}$ into a decimal it makes no difference in the result whether we have $\frac{2 \times 10 \div 5}{5 \times 10 \div 5} = \frac{2 \times 2}{5 \times 2} = \frac{4}{10} = \cdot 4$, or whether we have $\frac{2 \cdot 0}{5} = \cdot 4$.

But it makes a great deal of difference in the working whether in converting, say, $\frac{1868}{3736}$ into a decimal we first divide 1 by 3736 and

multiply the result by 1868, or whether we divide 1868 by 3736 and get ·5 as our answer at once.

A few examples of converting fractions into decimals are appended.

$$\frac{1}{2} = \cdot5 \; ; \; \frac{1}{4} = \cdot25 \; ; \; \frac{3}{4} = \cdot75 \; ; \; \frac{1}{8} = \cdot125 \; ; \; \frac{1}{3} = \cdot\dot{3} \; ; \; \frac{2}{3} = \cdot\dot{6}.$$

These are useful fractions of which to know the corresponding decimals. A recurring decimal is marked with a dot above it, and means that it is repeated continuously. Where a group of several figures recurs it is marked with a dot over the first and last of the group. Thus $\frac{1}{3} = \cdot33333$ and as many more threes as we care to write. It is shortly expressed as $\cdot\dot{3}$. If we wish to convert $\frac{1}{7}$ into a decimal, we have

$$7\overline{)1}$$
$$\overline{\cdot\dot{1}4285\dot{7}},$$

which means that at this stage there is 1 over, and the numbers 142857 would be repeated indefinitely if the division were continued for an indefinitely long time. Other examples are :—

$$4\frac{3}{8} = 4\cdot375 \; ; \; 7\frac{9}{16} = 7\cdot5625 \; ; \; \frac{17}{21} = \cdot\dot{8}0952\dot{3} \; ; \; \frac{14}{373} = \cdot0375335 + .$$

INTEREST TABLES

On pp. xx–xl and 50-124 Interest Tables of various kinds are given. Their construction and use is here explained, in order to facilitate their employment, and to make it possible for those unfamiliar with the subject to perform calculations at other rates and for other periods than those given in the table.

Unless otherwise stated the tables throughout the book are calculated at compound interest, not at simple interest. Compound interest, of course, means that the interest as it becomes due is added to the original debt, and the interest for subsequent periods is calculated on the original debt increased by all the previous accumulations of interest.

The Amount of £1

On pp. 50–85 are tables which show for various rates of interest—

(1) The sum which £1 will amount to in any number of years from 1 to 100.

(2) The present value of £1 due at the end of any number of years from 1 to 100.

(3) The sum to which £1 per annum will amount in any number of years from 1 to 100.

(4) The present value of £1 per annum to be received for any number of years.

We will consider these in the order stated, taking our illustrations principally from the 4 % table on pp. 70 and 71. It will be convenient to give the explanations by quite simple algebra first, and then to give the arithmetical explanations or numerical examples.

If by i we represent the rate of interest, it is clear that one pound, or one dollar, or any other unit, will amount in one year to $1 + i$; and if we represent the amount by s, we have $s = 1 + i$. If the rate of interest is 4 %, or 4 on one hundred, it is ·04 on a unit and $1 + i = 1·04$.

At the beginning of the second year, if the interest has not been paid, the loan or investment, s, is $1 + i$, $= 1·04$, and the interest on this is $i(1 + i)$, $= 1·04 \times ·04 = ·0416$. To find the amount at the end of the second year we must add the second year's interest to the amount at the beginning of the second year. Thus we have $(1 + i) + i(1 + i) = (1 + i) \times (1 + i) = (1 + i)^2$, or $1·04 + (·04 \times 1·04) = 1·04 + ·0416 = 1·0816 = 1·04 \times 1·04 = 1·04^2$.

We begin the third year with $s = (1 + i)(1 + i)$, and the interest for the third year is this amount multiplied by $i = i(1 + i)(1 + i)$, and, adding this to the amount at the beginning of the third year, we have $(1 + i)(1 + i)(1 + i) = (1 + i)^3$, $= 1·0816 + (·04 \times 1·0816) = 1·0816 + ·043264 = 1·124864 = 1·04^3$.

Thus the amount of one in any number of years, n, is the amount of one in one year raised to the nth power. This is expressed as $(1 + i)^n$, and, if $i = ·04$, then $(1 + i)^n = 1·04^n$. If $n = 5$ this is $1·04^5$. This may be seen below.

Year	Amount at Beginning of Year	Process	Amount at End of Year
1	1	$\times 1·04 = 1·04$	$= 1·04$
2	1·04	$\times 1·04 = 1·04^2$	$= 1·0816$
3	1·0816	$\times 1·04 = 1·04^3$	$= 1·124864$
4	1·124864	$\times 1·04 = 1·04^4$	$= 1·16985856$
5	1·16985856	$\times 1·04 = 1·04^5$	$= 1·2166529024$

This tells us the amount of 1, and, if we want to know what any other sum comes to, we must multiply the sum by the amount of 1.

What is the amount of £17 in five years at 4 %?

(9)

The amount of £1 is   1·21665

The amount of   17

is therefore   £20·68305

We might get this result more exact by using more places of decimals. Thus, 1·2166529024 × 17 = 20·6830993408, which is ·0000493408 more than we previously had. The difference is less than $\frac{5}{100000}$ of £1, which is $\frac{1}{1000}$ of a shilling, or almost $\frac{1}{20}$ of a farthing. This shows that five places of decimals, as given in the tables, give results quite near enough for most purposes.

It is explained later on (pp. 206–228) how easily a table of this kind can be constructed by means of logarithms the practical use of which is extremely simple, and if other rates of interest than those tabulated are needed they should be obtained by logarithms.

It should be noted that the table gives the amount of one pound at the *end* of the year, *i.e.* just after the year's interest has been added. The amount at the *beginning* of any year is the same as the amount at the end of the preceding year. Before explaining some of the uses of these tables it will be best to explain the contents of the other columns on these pages.

We at present assume that the interest is reckoned annually, but later on we shall consider the case of interest convertible half-yearly and at other intervals.

The Present Value of £1

If, as we have seen, £1 amounts to £1·04 in one year the present value of this £1·04 is obviously £1. In other words, £1 invested now at 4% will amount to £1·04 in one year. But if the present value of £1·04 = 1 the present value of $1 = \frac{1}{1·04}$, and using v to represent the present value of 1 one year hence we have $v = \frac{1}{1+i}$, and $v^n = \frac{1}{(1+i)^n}$, where, as before, n represents the term. If $i = ·04$ and $n = 5$ we have

$$v^5 = \frac{1}{(1+i)^5} = \frac{1}{1·21665} = ·82193.$$

Whatever the term may be

$$v = \frac{1}{1+i}$$

$$1+i = \frac{1}{v}$$

$$v(1+i) = 1$$

(10)

Thus to take 10 years at 4 %

$$\frac{1}{1+i} = \frac{1}{1\cdot48024} = \cdot67556 = v$$

$$1 + i = 1\cdot48024 = \frac{1}{\cdot67556} = \frac{1}{v}$$

$$v(1 + i) = 1\cdot48024 \times \cdot67556 = \cdot99999$$

By calculating the values of i and v to more places of decimals we may obtain as close an approximation as we please to 1 by multiplying v by $(1 + i)$.

To find the present value of any other sum than 1 we multiply the sum by the present value of 1 for the number of years required. Thus, the present value of £83 due at the end of 10 years at 4 % is $\cdot67556 \times 83 = £56\cdot07148$. It will be noticed that the table of present values, like the table of amounts, refers to the *end* of the year. See also pp. xviii, 218.

The Amount of £1 per Annum

The third table on each page gives the amount of £1 per annum immediately after each annual payment is made. Thus the first line is in all cases 1·00000. This table may be found from the amount of £1 by a series of additions. Thus at 4 %, if to the initial payment of £1 we add 1·04000, the amount of £1 in one year, we obtain 2·04000, which is the amount of £1 per annum immediately after the second annual payment has been made. If to this amount we add 1·08160, the amount of £1 at the end of the second year, we obtain £3·12160, the amount of £1 per annum immediately after the third annual payment has been made.

We can, however, obtain the result in another way. The amount of £1 in five years at 4 % is 1·21665, of which amount 1 was the original payment and ·21665 the accumulated interest. Now £1 yields ·04 every year at interest at 4 %, therefore the amount of ·04 per annum for 5 years is ·21665. But if ·04 per annum amounts to ·21665 in 5 years ·01 per annum will amount to one fourth of this sum, which is ·054163, and 1 amounts to 100 times this sum, which is 5·41632, which we see to be the amount of £1 per annum in 5 years. Hence it follows that we can obtain the amount of £1 per annum by subtracting unity from the amount of £1 and dividing the result by the rate of interest. Hence we get the following expression :

$$s_{\overline{n}|} = \frac{(1 + i)^n - 1}{i},$$

where $s_{\overline{n}|}$ is the amount of £1 per annum in n years, i is the rate of interest, and $(1 + i)^n$ is the amount of £1 in n years.

To find the amount of any other sum for any number of years we take from the table the amount of £1 per annum at the rate of interest and for the number of years required, and multiply this amount by the sum with which we have to deal. Thus the amount of £75 per annum for 30 years at 4 % = £56·08494 (p. 70) × 75 = £4206·3705. For further details see p. 224.

The Present Value of £1 per Annum

By similar reasoning we see that the present value of £1 per annum may be obtained from the present value of £1—that is to say, by a series of additions the present value of £1 per annum can be obtained from the present value of £1. It may also be obtained by a second method similar to the second method of finding the amount of £1 per annum from the amount of £1. Thus the present value of £1 at the end of 10 years is ·67556, and the difference between this amount and unity is ·32444, which is the present value of ·04 per annum for 10 years. The value of ·01 per annum is one fourth of this amount, which is ·08111. The present value of 1 per annum is 100 times this amount, viz. 8·111, which is seen (p. 70) to be the present value of £1 per annum for 10 years at 4 %.

It will be noticed that the present value of £1 per annum for 10 years is stated to be 8·11090, not 8·111. This slight discrepancy is due to the fact that the present value of £1 is only given to five places of decimals. If we calculate the present value of £1 due at the end of 10 years at 4 % to six places of decimals instead of five we find that it comes to ·675564. Subtracting this amount from unity we obtain ·324436, which divided by 4 and multiplied by 100 gives us 8·11090 as the present value of £1 per annum for 10 years, which is in accordance with the table.

This relation between the present value of £1 and £1 per annum may be expressed by the formula

$$a_{\overline{n}|} = \frac{1 - v^n}{i}$$

where $a_{\overline{n}|}$ is the present value of £1 per annum for n years, v^n is the present value of 1 due at the end of n years, and i is the rate of interest.

A knowledge of the methods by which the tables are constructed greatly facilitates their use. Hence in all cases we first describe the construction of the tables and then give some account of the purposes to which they may be applied. See also pp. xviii, 222.

The table giving the present value of £1 per annum is applicable to many different purposes. Thus if we want to know the present value of an annuity, or pension for a definite number of years—the

value, that is to say, of what is called an 'annuity certain,' or the value of a lease, or of any other property yielding a fixed and certain yearly income, we can readily obtain it from this table. Thus a lease, or annuity, yielding £1 per annum, with 25 years to run, if purchased for £15·62208, would yield the purchaser 4% on his money and replace the capital by the end of 25 years. If the annuity were £10 a year its value would be ten times as much; if £20 a year, twenty times as much, and so on.

We sometimes want to know what rate of interest will be yielded by purchasing an annuity for a given amount at a certain price, which may not be exactly any rate of interest that is here tabulated. In order to ascertain this we must see what an annuity of £1 per annum would cost at the same price, and then turning to tables at various rates we shall be able to see approximately what rate the investment would yield. Thus, if we buy an annuity of £30 a year, for 20 years, for £450 we see that an annuity of £1 per annum at the same price would cost £15. A reference to the tables on pp. 64 and 66 shows that this is less than we should pay to yield $2\frac{3}{4}$% on the investment, and more than we should pay to yield interest at 3%; but the return would be more nearly 3% than $2\frac{3}{4}$% being, in fact, a trifle over $2\frac{7}{8}$%. It is sometimes convenient to be able to see the results at different rates of interest in this way; consequently on pp. 86–93 abbreviated tables showing the amount and present value of £1 and of £1 per annum are printed. These are only extracts from the tables on pp. 50–85 arranged in a different form with a few other rates of interest added.

The Present Value of a Perpetuity

On p. 94 is given the present value of a perpetuity of £1 per annum for every $\frac{1}{8}$% up to 10%. These results are obtained by dividing 100 by the rate of interest. From this table the value of freehold property, advowsons, &c., can be obtained, it of course being necessary to ascertain the net annual value of the property on which to base the price to be paid for it. Thus a freehold yielding £80 per annum, after deduction of all expenses connected with it, would yield 4%, if purchased for £2,000, for 25 × 80 = 2,000. If the same property were purchased for £1,800, which is at the rate of £22 10s. (for 1,800 ÷ 80 = 22·5) for each £1 per annum, the yield upon the capital invested would be between $4\frac{3}{8}$ and $4\frac{1}{2}$%.

Present Value of Reversions

On pp. xxxii–xxxix and 95–98 is given the present value of a Reversion to a Perpetuity of £1. On p. 94 we have the present value of a

perpetuity to be entered upon immediately, and on pp. xx–xxxi and 50–85 we have the present value of an annuity for any number of years from 1 to 100. By subtracting the present value of an annuity for a certain number of years from the present value of a perpetuity we obtain the present value of a perpetuity deferred for that certain number of years. Thus we see that the present value of a perpetuity of £1 per annum at 4% is £25 (p. 94). The present value of an annuity of £1 per annum for 20 years at 4% is £13·59033 (p. 70). Deducting this amount from £25, we have £11·40967 as the present value of the Reversion after 20 years of a Perpetuity of £1, which is the amount given on p. 98. The present value of a perpetuity of any other amount than £1 is obtained by multiplying the value of a perpetuity of £1 by the amount of the perpetuity the value of which it is desired to obtain.

Commutation of Fines for Renewing Estates

Estates held in perpetuity are sometimes subject to a renewal fine to be paid by the holder at regular specified intervals. These periodical fines may be compounded for by a single payment down. The first table on p. 99 shows what this payment ought to be, so that the holder of the estate may redeem all these continually recurring fines and at the same time be allowed such interest upon the money thus paid in advance as may be agreed upon. Thus if the renewal fine is payable every 7 years for ever then the redemption money to bear 5 % interest is found by the table to be 2·4564. This means that £2·4564 must be paid to redeem a fine of £1 payable every 7 years. To redeem a fine that is equivalent to one year's rent a sum equal to 2·4564 times the annual rent must be paid. It is obvious that the redemption money must be that sum the interest upon which, if allowed to accumulate at compound interest at the rate agreed upon for the period between the fines, will just suffice to pay the fine. A reference to p. 74 shows that the amount of £1 for seven years is £1·40710. Deducting from this amount the original £1 invested, we see that the interest on £1 invested for 7 years is £·40710. If now we multiply ·40710 by 2·4564, the amount required to redeem a fine of £1 payable every 7 years, reckoning interest at 5 %, we have ·40710 × 2·4564 = 1. Thus it will be seen that in every 7 years the interest on the redemption money amounts to exactly enough to pay the fine.

Renewal of any Number of Years Expired in a Lease

The second table on p. 99 and the tables on pp. 100–103 show the number of years' purchase for the renewal of any number of years

expired in leases of various length. A reference to p. 70 shows that the present value of £1 per annum for 10 years is £8·11090, and on p. 99 we see that the amount to be paid for the renewal of a 10 years' lease is this same sum of £8·11090, which may be read as either £8·11090 for every £1 of income annually derived from the lease, or as 8·11090 years' purchase of the annual income from the lease. But if we own a lease that has, say, 5 years to run and we want to convert it into a lease that has 10 years to run, it is obvious that we must pay something for the extension of the lease. Reckoning interest at 4 % we have just seen that the value of a lease for 10 years is 8·11090 times its annual value, and another reference to p. 70 shows that the value of the 5 years' lease we at present possess is £4·45182 for every £1 of annual income ; in other words, the value of the 5 years' lease we hold is 4·45182 times the annual value of the lease. Deducting this value of the 5 years' lease we own from the total value of the 10 years' lease we wish to obtain, we have 3·65908 as the number of years' purchase to be paid for extending our 5-year lease into a 10-year lease.

We could obtain the same result from the table on p. 70 showing the present value of £1 instead of the present value of £1 per annum. We are obviously entitled to the benefit of the lease for the next 5 years, and the additional benefit we have to pay for by having the lease extended to 10 years is equivalent to the present value of

					£
£1 due at the end of 6 years				=	·79031
£1	,,	,,	7	,, =	·75992
£1	,,	,,	8	,, =	·73069
£1	,,	,,	9	,, =	·70259
£1	,,	,,	10	,, =	·67556
Total	.	.	.		3·65907

This gives us £3·65907 as the present value of £1 per annum for the 6th to the 10th years, or 3·65907 years' purchase of the annual value of the lease, and is the same result as we obtained before, except that the last figure is a 7 instead of an 8, which is due to the number of decimal places to which the calculations were carried not being sufficient to produce absolutely identical results.

The tables referring to the Renewals of any number of years in leases for 20, 21, and 40 years are calculated in the same way, and the renewal of leases for different times, or at other rates of interest than those given on pp. 99–103, may be readily calculated from the present value of £1 per annum given on pp. 50–85 by subtracting the present value of £1 per annum for the number of years the lease we own has to run from the present value of £1 per annum for

the number of years for which the fresh lease will be granted. It will be noticed that the last column in the table dealing with the 10 years' lease is headed 17·95 % ; in the 20 years' lease 12·304 % ; in the 21 years' lease 11·564 % ; and in the 40 years' lease 8 %.

These rates of interest are respectively equivalent to a fine of 1 year's rent every 4, 7, 7, and 14 years. The extraordinary rates of interest here referred to result from customs that must presumably have originated from ignorance of the real rates of interest involved.

Yield per cent. and Years' Purchase

The percentage per annum which each number of years' purchase of a perpetuity yields to a purchaser is obtained by dividing 100 by the number of years' purchase. The results are given on p. 104.

Interest, Amount, and Discount

On p. 105 are shown the interest, amount, and discount of £1 in a year, and in 9, 6, and 3 months. The interest is calculated annually, and consequently in 9 months it is $\frac{3}{4}$ of the interest earned in a year ; in 6 months $\frac{1}{2}$, and in 3 months $\frac{1}{4}$ of the annual interest. The 'amount' of £1 is simply the addition of the interest to the original £1. Were the interest to be calculated at other intervals than that of 1 year the figures here given would be different, as we shall see (p. 18) when we come to refer to the question in detail.

Discount is the value at the beginning of a period of the interest to be received at the end—in other words, discount is the interest paid in advance. Thus the present value of £1 due at the end of a year, reckoning interest at 4 %, is £·96154 (p. 70). The value of £1 now due is, of course, £1, and the discount is the difference between these two amounts, which is £·03846 ; that is to say, if we owe an amount of £1 which is due to be paid one year hence, and, to suit the convenience of a creditor, we pay it twelve months in advance, we ought to be allowed a discount of £·03846 ; that is to say, we should pay £·96154 now instead of paying £1 a year hence. This is obviously fair, since if we invested the £·96154 at 4 % for a year it would at the end of that time amount to the £1 we should have to pay.

Sinking Fund

On pp. 106–115 is given the annual amount to be set aside and invested in order to replace the capital at the end of the selected period. This table is obtained by dividing unity by the amount of one pound per annum, as given on pp. 50–85. Thus, comparing the amount of £1 per annum at 4 %, as given on p. 70, divided into unity with the Sinking Fund in the 4 % column on p. 112, we have for :

Year   1, $1 \div 1·00000 = 1·000000$,

     ,,   10, $1 \div 12·00611 = ·083291$;

     ,,   20, $1 \div 29·77808 = ·033582$;

     ,,   30, $1 \div 56·08494 = ·017830$.

This may be stated the other way about, and we may say that £·083291 per annum accumulated for ten years at 4 % amounts to £1, or $·083291 \times 12·00611 = 1$.

In this table no provision is made for paying interest on the capital. If this has to be done the amounts given in the sinking fund table must be increased each year by the interest on £1. Thus to repay £1 in ten years, and to pay interest annually at 4 %, needs an annual payment of $·083291 + ·04 = ·123291$. Of this amount ·04 pays the interest each year, and ·083291 accumulated at 4 % replaces the original £1 invested.

If we take ·123291 and accumulate it at 4 %, we find that in ten years it amounts to $·123291 \times 12·00611 = 1·48024$, which, from p. 70, we find is the amount to which £1 amounts in ten years at 4 % if the interest on it is allowed to accumulate instead of being drawn annually.

In using this table care must be taken to notice whether the purpose for which it is required calls for interest on the original investment to be paid annually or not. See pp. 225 and 219.

If the purchaser of a leasehold property wishes to set aside out of the net rent received sufficient to replace the purchase price by the time the lease expires, the table must be used as it stands, the difference between the net rent and the sinking fund constituting the interest on the purchase price of the lease.

If, on the other hand, a loan has to be repaid, say, in 10 years, with interest at 4 %, either the interest on the loan must be paid annually, in addition to the sinking fund as given in the table, or ·04 must be added to the sinking fund for every £1 borrowed, and allowed to accumulate with it.

If the interest is at 1 % there must be an addition of ·01 to the annual sinking fund for every £1 borrowed; if at 2 % an addition of ·02; if at 5 %, of ·05; if at 10 %, of ·1; and so on.

Value of Annuity to Yield Interest on Capital at One Rate, and Replace Capital at a Lower Rate

On pp. 116–121 if are given the annual payments required to pay interest at comparatively high rates, and to replace the capital by a sinking fund accumulating at a lower rate. From p. 110 we learn that £·087231 per annum at 3 % for 10 years will amount to £1. But if we have to pay 5 % per annum upon the £1 we must add £·05 to the sinking fund payment of £·087231. These two amounts come to £·137231, and would suffice, if paid annually for 10 years, to pay 5 % per annum on the original loan of £1, and to replace the £1 by accumulation at 3 %. The present value of this annuity of £·137231 on these terms as to interest is therefore obviously £1. But if the value of an annuity of £·137231 is £1, the value of an annuity of £1 is $\dfrac{1}{·137231} = 7·287$, which, on reference to p. 120, we see to be the value of an annuity of £1 yielding interest on capital at 5 %, and replacing capital when invested at 3 %.

These terms are very onerous to the borrower, since he has to pay interest at a high rate on the whole capital for the whole term, although by the accumulation of the sinking fund the capital may be rightly considered as partly repaid.

These tables may be readily extended to other periods and rates of interest by taking the reciprocal of the amount obtained by adding to the sinking fund payment the annual interest on the loan. The reciprocal of a number is obtained by dividing unity by the number.

The value of an annuity of any other amount than £1 per annum is obtained by multiplying the figures in the table by the amount of the annuity. See also p. 226.

Nominal and Effective Rates of Interest

On p. 122 is given a table comparing nominal and effective rates of interest. This subject is a somewhat intricate one, but the main principles underlying it may be grasped without much difficulty. Hitherto we have been considering that the rate of interest was calculated annually. We now have to deal with the case of interest calculated half-yearly, quarterly, and monthly. Suppose the nominal rate to be 4 % per annum ; it will obviously be 2 % for 6 months, and at the end of the first half-year an original investment of £1 will amount to £1·02. For the second half-year interest at the rate of 2 % for every 6 months is now earned upon £1·02 instead of upon only £1. This brings the amount of the original investment at the end of the second half-year to £1·0404 instead of

to only £1·04, which is the amount it would have been if the interest had been calculated annually instead of half-yearly. A reference to p. 58 will show that this is the amount that £1 amounts to in 2 years at 2 %. Hence we see that if we want to calculate interest at more frequent intervals than 1 year we can divide the nominal rate of interest by the number of periods (at which interest is to be calculated) that are contained in a year, and take the interest for this number of years at the resulting rate of interest. In other words, we see that instead of talking about years we can talk about periods, and if we want to talk about interest that is nominally 4 % per annum, but really 2 % for 6 months, or if convertible quarterly 1 % for 3 months, we may turn to a 2 % table and look at the result after 2 periods and a 1 % table to find the result after 4 periods. Thus on p. 50 we see that £1 accumulated for 4 periods at 1 % amounts to £1·0406, the interest being £·0406, which is the effective annual rate when interest is convertible quarterly, shown on p. 122 as corresponding to a nominal annual rate of 4%. The same thing holds if interest is convertible monthly. The amount of £1 accumulated for 12 periods, whatever their length, at $\frac{1}{2}$ % per period, would amount to £1·061678, and ·061678 is shown on p. 122 to be the effective annual rate when interest is convertible monthly, if the nominal rate is 6% per annum. The lower part of the table is the converse of the upper. If the real or effective rate is 4 % per annum the nominal annual rate, when interest is convertible half-yearly, is £·039608, or ·019804 per half-year. Thus £1 for 6 months at ·019804 % per 6 months amounts to £1·019804. During a second period of 6 months this amount at the same rate of interest earns £·020196, which added to the £1·019804 makes up £1·04, which is equivalent to the amount of £1 at an effective annual rate of 4 %. The higher the rate of interest and the more frequently the interest is convertible the greater is the difference between the effective and the nominal rates. See Preface to 26th Edition.

Annuities Payable Half-yearly, Quarterly, and Monthly

If we are entitled to receive an annuity of £1 per annum, payable yearly, but, instead of receiving it annually, receive it every 6 months, we obviously receive the amount of the half-yearly payment sooner than we are entitled to; and if that half-yearly payment were invested for 6 months, the 2 half-yearly payments, together with this 6 months' interest on one of them, would amount to more than the annual payment to which we are entitled supposing the half-yearly payments were exactly half the yearly payment. That is to say, if the annuity to which we are entitled annually is divided into 2, or

4, or 12 equal parts, and paid half-yearly, quarterly, or monthly, its capital value is greater than if the annuity were paid annually. As a concrete instance of this we have, on p. 123, the value of an annuity of £1 per annum for 25 years at 4 %. If the annuity is payable annually and the interest convertible annually, the present value of the annuity is £15·62208, which is the figure given for its value on p. 70, as also on p. 123. To find the value of an annuity of 10s. every 6 months for 25 years at 4 % we multiply £15·62208 by 1·0099, the factor given in the upper table on p. 123. This gives us 15·77677 as the value of an annuity of 10s. every 6 months for twenty-five years, reckoning interest at 4 % per annum.

Similarly an annuity of £1 per annum payable quarterly—that is, 5s. every three months—is worth 15·62208 × 1·01488, or £15·85449. The value of an annuity payable monthly is calculated on similar principles, the constant factor by which to multiply the value of the annuity payable yearly being 1·0182.

If the interest is convertible half-yearly, and the annuity payable half-yearly, we can obtain the value of the annuity from the tables on pp. 50–85, by considering that we have an annuity of one-half per period for 50 periods at 2 % instead of an annuity of 1 for 25 periods at 4 %. A reference to p. 58 shows us that the present value of £1 per annum for 50 periods is £31·42361, the half of which is £15·71180, which is the value given in the middle table on p. 123 for an annuity payable half-yearly when the interest is convertible half-yearly. Similarly an annuity of 5s. every three months at 4 % per annum convertible quarterly, which is 1 % every three months, is $\frac{1}{4}$ of £63·02888, which on p. 51 is seen to be the amount of £1 per annum for 100 periods at 1 %. Now £63·02888 ÷ 4 = £15·75722, which on p. 123 is seen to be the value of an annuity for 25 years at 4 % payable quarterly, with interest convertible quarterly.

This subject is dealt with and the appropriate formulæ given in the 'Theory of Compound Interest and Annuities' by Fédor Thoman.*

Present Value and Discount

The bottom table on p. 123 gives to 9 places of decimals the present value of £1 due one year hence, which has already been given to fewer places of decimals on pp. 50–85, and explained on p. 10. The discount has been given for most rates of interest, but fewer places of decimals, on p. 105, and explained on p. 16. No further explanation is therefore necessary here, but for some pur-

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* London : Crosby Lockwood and Son.

poses it is convenient to have these items calculated with greater approach to accuracy, as is here done.

Time in which an Amount Doubles at Interest

On p. 124 is stated the number of years in which an amount is doubled at simple and compound interest. At simple interest all we have to do is to divide 100 by the rate of interest ; thus, £100 at 4 % yields £4 per annum, and dividing 100 by 4 we obtain 25 years as the time it will take for the interest to amount to the same as the principal, or, in other words, double the principal.

At compound interest we obtain the number of years in which the interest will amount to the capital approximately by dividing ·69 by the rate of interest, and still more nearly by dividing ·693 by the rate of interest and adding ·35 to the result. Thus $\dfrac{·693}{·05} + ·35 =$ 13·86 + ·35 = 14·21.

Decimals of One Year

On p. 124 are given the decimals of 1 year, representing various numbers of weeks, months, and days. From what has been said on p. 7 it will readily be apparent how these figures are arrived at. There being 52 weeks in a year, 13 weeks, for example, is obviously $\dfrac{13}{52}$ of a year. To convert the fraction $\dfrac{13}{52}$ into a decimal we divide 13 by 52 and find that it goes ·25 times. We assume the year to contain exactly 52 weeks, exactly 12 months, and exactly 365 days, the consequence being that though the figures given are right for practical purposes they are not entirely accurate. There are more than 52 weeks and more than 365 days in a year, while no calendar month is exactly $\dfrac{1}{12}$ of a year.

If we meet with the decimal of a year different from any given in the table, and desire to know how many weeks, or months, or days it corresponds to, we must multiply by 12 to get the answer in months, multiply by 52 to get the answer in weeks, and multiply by 365 to get the answer in days.

Decimals of £1

On pp. 125–128 is given the decimal corresponding to every farthing in the £1. The first and last columns on each page give

the pence and farthings up to $11\frac{3}{4}d.$, while at the top of each of the other columns the shillings are stated to which the figures in the columns refer. Thus if we wish to know the decimal corresponding to $4s.$ $3d.$ we look in the column marked $4s.$ on the line marked $3d.$, and find that the required decimal is £·21250. Again, if we want the decimal corresponding to $13s.$ $7\frac{1}{4}d.$ we look on p. 127, column $13s.$, line $7\frac{1}{4}d.$, and find the required decimal to be £·68021. To obtain these results we must first convert the farthings into the decimal of a penny, then the pence and decimals of a penny into the decimal of a shilling, finally the shillings and decimals of a shilling into the decimal of a pound. Thus in the example we have just taken of $13s.$ $7\frac{1}{4}d.$

$$\text{One farthing} \quad = \quad \frac{1}{4} \quad = \text{·25 of a penny,}$$

$$7\text{·25 pence} \quad = \quad \frac{7\text{·25}}{12} \quad = \text{·6042 of a shilling,}$$

$$13\text{·6042 shillings} = \frac{13\text{·6042}}{20} = \text{·68021 of a pound,}$$

which is the result given in the table.

To find the number of shillings, pence, and farthings corresponding to a given decimal we have only to look for the decimal nearest to the one we are dealing with, which is easily found in the table, as the decimals come in regular order throughout.

To calculate the shillings, pence, and farthings corresponding to a given decimal we have only to carry out the converse of the process just described, multiplying first by 20 to get the shillings and decimals of a shilling, then multiplying the decimal part of a shilling by 12 to get the pence, and multiplying the decimal part of the penny by 4 to get the farthings. Thus :

$$\text{·68021 of a £} \quad \times 20 = 13\text{·6042 shillings}$$
$$\text{·6042 of a shilling} \times 12 = \quad 7\text{·25 pence}$$
$$\text{·25 of a penny} \quad \times 4 = \quad 1 \text{ farthing}$$

It will be convenient to remember that $1s.$ is ·05 of a £, $2s.$ is ·1 of a £, and every even number of shillings is expressed by half the number with a decimal dot to the left of it. Thus $4s. =$ £·2, $12s.$ $=$ £·6, and so on. In the same way an odd number of shillings is always represented by a decimal ending in 5, and is half its own amount. Thus $5s. =$ £·25 of a £; $9s. =$ £·45, and so on.

The figures in the column headed 0 shillings on p. 125 may be conveniently studied, for it will be seen that the last four of them are repeated exactly in all the columns headed with an even number of shillings, while in the columns headed with an odd number of

shillings the last three of them are repeated exactly, and the figure in the second decimal place is in every instance increased by 5. Familiarity with the figures in this first column, especially those relating to an exact number of pence, when combined with the rule just referred to relating to shillings, will enable any one with a little practice to know the number of shillings and pence represented by a given decimal as readily as if the shillings and pence were actually written down, and conversely the decimal corresponding to any number of shillings and pence will be at once known without any calculation being consciously made.

MORTALITY TABLES

On pp. 130–136 certain statistics are given concerning the duration of human life. On pp. 130–131 the expectation or average duration of life is stated according to various mortality tables.

The first table mentioned is the Northampton, prepared by Dr. Price in 1780. This table for many years after its publication was much used, and many calculations based upon it are retained in the present volume. It contains, however, a great many serious defects, and its use for transactions on a large scale as a guide to the duration of Life has long since been abandoned.

The Carlisle Table, published in 1815, was greatly superior to the Northampton, and may still be used with advantage in many transactions in which the duration of life is concerned. The Experiences of the Equitable Society and of Seventeen Offices, published in 1834 and 1843 respectively, deal with assured lives, but are of less importance in connection with the valuation of life interests of all kinds than either the Carlisle or the Actuaries' Healthy Males Table. The English Experience (No. 3) is a very valuable table, dealing with the mortality recorded by the Registrar-General, and is the most reliable for questions of mortality among the general population. The Actuaries' Healthy Males Table, published in 1869, is the most reliable record of assured lives, and is the result of the experience accumulated by a large number of life offices. It is the best record of mortality among this class of people—that is to say, among people who have been subjected to a medical examination before going under observation, but who have since lived the ordinary lives of middle-class English people.

Another table of considerable importance in connection with annuity transactions is the Government Annuitants, in regard to which some information will be given later on.

The fundamental facts to be learnt from a life table are the

number living at the beginning of each year and the number dying during the year. When this information is available it is easy to calculate the probable number out of every 100 alive at the beginning of the year who will survive the year and who will die during the year; the percentage surviving and dying in each year together adds up to 100, as may be seen in columns 4 and 5 on pp. 134 and 135. The expectation of life given on pp. 130 and 131 shows the average duration of life among a large number of people, and is determined by dividing the total number of years that a given number of people will live by the given number of people under observation. Thus, if we examine the table on p. 135, from age 90 we see that of 1,460 living at age 90

1,052	reach the age of		91
723	,,	,,	92
469	,,	,,	93
274	,,	,,	94
135	,,	,,	95
49	,,	,,	96
9	,,	,,	97
2,711			

Adding together the number who survive to the different ages, we find that the 1,460 people with which we commenced live between them 2,711 complete years; and, dividing this number by 1,460, we get an average of 1·857 complete years as the duration of life of each of the 1,460 people whom we commenced to observe at the age 90. This, however, considers only the *entire* years that are survived; lives that live to 91 years and 11 months are treated as if they only lived to 91. It is, however, much more likely that the deaths will be fairly evenly distributed throughout the year, and they may, therefore, be reckoned as happening in the middle of each year.

In these figures, therefore, we are reckoning that each one of the lives under observation would live six months less than would actually be the case, and if we add this half-year to the 1·857 years, we arrive at 2·357, which is the average expectation of life given in the H$_M$ column on p. 131.

We sometimes hear of the Curtate (or cut short) expectation of life, which means the number of *complete* years of life which people of the given age may, on the average, expect to live; the Curtate expectation of life at age 90 is the 1·857 years, which we obtained above, and it is always half a year less than the complete expectation of life given on p. 131.

The expectation of life cannot properly be used in calculations

with which interest is concerned, for the reasons to be given here-
after (p. 26) ; nor can we learn from the expectation anything about
the probable duration of life of any individual. It is, however, a re-
markable fact that, while the time at which any individual will die is
uncertain in the extreme, the average duration of life among large
numbers of people is very uniform. The expectation of life should
also be distinguished from the *Vie Probable*, or probable lifetime.
This means the number of years that have to elapse before exactly
half the number of people alive at a given age have died. Thus
from the table on p. 135 we find that 51,373 people are alive at age
64. By age 75 we find that only half this number survives, the
other half having died in the meantime. The *Vie Probable* at age
64 is therefore the difference between 64 and 75, viz. 11 years.

Mortality of Single Lives and Interest

The tables on pp. 138–154 are concerned with single lives and
interest. They give the values of annuities and the single and
annual payments to secure £1 at death, together with the values of
reversions.

Values of Annuities

The tables that are in many ways the most important are those
which give the values of annuities to be received annually through-
out the lifetime of the person of the age stated. In every case,
unless specially mentioned as being otherwise, an annuity means an
annual payment of £1, or of course $1, or any other unit, the value
being given in pounds if the annuity is £1, in dollars if the annuity
is $1, and so on. Annuity values derive their importance not
merely from the immediate use that may be made of the table, but
also from the facility with which other benefits dependent upon the
duration of life may be derived from them. It is therefore worth
while to explain in some detail how the annuity values may be
determined. If we know that 1 year hence we have to pay £1,
reckoning interest at 3 %, we can tell from p. 66 that we must have
£·970874 in hand now in order to possess £1 in a year's time,
while, according to the Carlisle Table on p. 136, we see that out
of 30 people alive at age 95 seven will die during the year, and that
consequently there will be 23 people alive 1 year hence to receive
£1 each, assuming we have contracted with the 30 people to pay
each of them £1 per annum as long as they are alive. In order to
make this first payment to our annuitants we must therefore have 23
times £·970874, viz. £22·330102, and so on in succeeding years,
as set out in the following table : —

Table Showing the Value of an Annuity of £1 per Annum payable at the End of the Year to each Survivor of 30 Persons, Age 95

Year	Number living at End of Year	Present Value of £1 due at End of Year	Present Value of £1 to each Survivor
		£	£
1	23	·970874	22·3301
2	18	·942596	16·9667
3	14	·915142	12·8120
4	11	·888487	9·7734
5	9	·862608	7·7635
6	7	·837484	5·8624
7	5	·813091	4·0655
8	3	·789491	2·3685
9	1	·766417	·7664
Total	...	...	82·7085

Total cost of 30 annuities, £82·7085.
Cost of 1 annuity, £82·7085 ÷ 30 = £2·75695.

From this we see that, assuming mortality to occur according to the Carlisle Table, we need to have £82·7085 in hand now, and to be able to earn interest upon it at 3 % in order to pay an annuity to each of 30 people at present age 95. If this is the value of 30 annuities, the value of 1 annuity is £2·75695, or, stated to the nearest third decimal, £2·757 as given in the 3 % column on p. 141.

The advanced age of 95 was chosen as an illustration, in order to avoid the lengthy table required to illustrate the value for younger ages. It will be noticed that it is necessary to proceed year by year up to the end of the mortality table. It is not correct, as is sometimes supposed, to take the average duration of life and then see the present value of £1 per annum for that number of years. Thus, according to the Carlisle Table, the average duration of life at age 35 is 31 years. If we take the present value of £1 per annum for 31 years from the tables given on pp. 66–80, and compare them with the annuity values on p. 140, we have the following results :—

Rate of Interest	Value of Annuity according to		Error in Excess
	Expectation	Table, p. 140	
Per Cent.	£	£	£
3	20·000	18·433	1·567
4	17·588	16·041	1·547
5	15·593	14·127	1·466
6	13·929	12·573	1·356
7	12·532	11·295	1·237
8	11·350	10·235	1·115

If interest had not to be considered, the value of an annuity could correctly be obtained from the average duration of life, since if, say, 100 people at age 35 live 3,100 years between them we must obviously have £3,100 to pay them £1 per annum during life. But when the accumulation of interest comes in we can no longer base our calculations upon the expectation of life, even with the use of an interest table, without getting, as shown above, erroneous results.

In these tables no provision is made for any expenses connected with the granting of annuities, such as has to be provided in the case of life assurance companies who grant them. Although the word annuity is used throughout the tables, the tables of course apply to income derived from any source, whether ordinarily called an annuity or not. Thus, suppose we wish to ascertain the value of a life interest derived from trust funds, or from a lease dependent upon the duration of life, these tables of annuity values of course apply.

Private individuals who use these tables for the purpose of dealing with annuities must remember that dealing with only a few lives is a very speculative transaction. A purchaser may buy a life interest to-day, and the life on whose duration the income depends may die to-morrow, and the bargain prove a bad one, or may live an abnormally long while, and the bargain prove a good one ; so that no tables can give any idea of the value of an annuity on only one life. They give correctly the average value of annuities on many lives, and where many lives are concerned are a reliable guide. This is a point that should always be borne in mind by people dealing in life interests of any kind on a small scale.

On pp. 142 and 143 the values of annuities are given according to the Healthy Males Table published by the Institute of Actuaries. These are not the most suitable tables to use for determining the value of an income for life considered by itself, but they are the best tables for many other purposes, and the annuity values are very convenient for calculating the values of other benefits.

On pp. 144 and 145 annuity values are given according to the experience of Government annuitants. These tables are at present the most reliable guide to the average value of annuities. It is well known that annuitants live long, and consequently tables that correctly record the mortality experience of annuitants are not usually appropriate for determining the value of assurance, and *vice versa*. Several very heavy losses have been made in times past by this now most obvious fact having been overlooked.

Single and Annual Payments to secure £1 at Death

On pp. 146–151 the single and annual payments to secure £1 at death are tabulated. There is a very close connection between these

items and the values of annuities. Advantage is taken of this connection to derive the values of assurances from those of annuities by means of Premium Conversion Tables, such as are given on pp. 185 and 186, in describing which this connection is explained (p. 35). For the moment it will be sufficient to notice that the single payments to secure £1 at death can be readily obtained from the annuity values, pp. 138-145, by means of conversion tables, and the annual payments to secure £1 at death can also be obtained from the same pages. For details see pp. 35–39.

Value of Reversions

If we wish to know the average value of the reversion to a sum of money on the death of a person of a given age we can at once obtain it by multiplying the single payment to secure £1 at death by the sum in question. If, however, we wish to know the value of a reversion to a perpetuity—that is to say, to a perpetual income such as may be derived from freehold property—it is convenient to proceed somewhat differently. On p. 94 we have the present value of a perpetuity to be entered upon at once, but if it is not to be entered upon until the death of a person of a given age it is obviously worth less than if we were to obtain possession at once. The difference between the present value of immediate and of deferred possession is the present value of the benefit the existing holder will receive from it ; in other words, the difference between the value of immediate and of deferred possession is the value of an annuity on the life of the present holder. Thus at 4 % the value of a perpetuity with immediate possession is £25. The value of an annuity at age 50 according to the Carlisle Table is £12·869, so that the value of a perpetuity to be entered upon at the death of a person of age 50, according to the Carlisle Table at 4 %, is 25·000 − 12·869 = 12·131, which is the amount given on p. 154. Hence it appears that to obtain the present value of the reversion to a perpetuity at the death of a person of a given age we must deduct the value of an annuity during the life of that person from the value of a perpetuity to be entered upon immediately, as given on p. 94.

The present value of reversions of this kind are given at considerable detail on pp. 152 and 153, according to the Government Experience Table, because this is on the whole the most reliable table for the purpose. The values according to other tables and for other ages may readily be obtained by the simple rule just stated.

Two Lives and Interest

The tables on pp. 156–181 deal with various benefits that are dependent upon the duration of one or both of two lives. In such cases it is necessary to distinguish carefully in what way the lives enter into the question. We sometimes have to deal with joint lives, in which case an annuity is payable so long as *both lives continue* and ceases at the end of either of them, or in the case of joint life assurance the sum is paid on the occurrence of the *first* death. Then we have benefits such as annuities or assurances dependent on the duration of the *longer* of the two lives ; that is to say, an annuity payable to the last survivor continues so long as either of the two people concerned is alive, or in the case of assurance the sum assured is paid at the death of the *second* of the two. Yet again we have Contingent Survivorship benefits, such as the assurance of a sum of money to be paid at the death of X, if Y is living when X dies, nothing being paid in the event of Y dying before X.

Joint Life Benefits

We will deal first with the values of annuities payable during the joint life of two persons—payable, that is to say, so long as both persons are alive, and ceasing when either of them dies.

We have already explained on p. 26 how the value of an annuity can be calculated if we know the probable number out of every 100 alive at the beginning of a year who will survive to the end of the year, and we must now explain how to ascertain this probability in regard to pairs of lives as distinguished from individual lives, with which we were formerly dealing. We may use in illustration the Healthy Males Mortality Table given on pp. 134 and 135, taking one life at age 30 and the other at age 60. The probability that a life aged 30 will survive one year is seen to be 99·2277 out of every 100, and that of a life aged 60 is 97·0322 out of 100. If we multiply these two probabilities together, we obtain the probability of both persons surviving the year, which works out at 96·283 out of 100. We can deal with successive years in the same way, and so make a fresh Mortality Table for pairs of lives instead of for individuals. Such a table for ten years is given below for two lives aged respectively 30 and 60 at the time they came under observation :—

Table Showing probable Duration of Pairs of Lives. HM Table					
Younger Life		Elder Life		Pairs of Lives	
Age	Probable Number out of every 100 who survive the Year	Age	Probable Number out of every 100 who survive the Year	Probable Number out of every 100 who survive the Year	Number of Pairs living at Beginning of each Year
(1)	(2)	(3)	(4)	(5)	(6)
30	99·2277	60	97·0322	96·283	10,000
31	99·2083	61	96·7962	96·030	9,628
32	99·1895	62	96·5364	95·754	9,246
33	99·1715	63	96·2510	95·454	8,853
34	99·1496	64	95·9590	95·143	8,451
35	99·1226	65	95·6569	94·818	8,040
36	99·0891	66	95·3431	94·475	7,624
37	99·0536	67	95·0111	94·112	7,203
38	99·0220	68	94·6766	93·751	6,778
39	98·9918	69	94·2660	93·316	6,355
40	—	70	—	—	5,930

The probable number of individuals who will survive out of every hundred at each age is given in column 4 on pp. 134 and 135, and by multiplying together the fractions obtained by putting these numbers as numerators and 100 as denominators we obtain the probability that a pair of lives of these ages will survive one year.

The first column gives the age of the younger life and the third column the age of the elder life, and the details given in columns 5 and 6 refer to pairs of lives of the ages given in columns 1 and 3. Columns 2 and 4 are copied from the mortality table on pp. 134 and 135. In column 5 we have the probable number out of every 100 pairs of lives who survive the year. This is obtained for ages 30 and 60 by multiplying $\frac{99·2277}{100} \times \frac{97·0322}{100}$, which equals $\frac{9628·3}{10000}$ as the probability for each pair, or 96·283 pairs per 100. The details for other years are obtained in the same way. The last column gives the number living at the beginning of each year out of every 10,000 pairs alive at the commencement. This corresponds to column 2 of the mortality table on pp. 134 and 135. By multiplying the number living at one pair of ages by the probability of surviving one year we obtain the number living at the commencement of the next age. Thus :—

$$10000 \times \frac{96·283}{100} = 9628.$$

$$9628 \times \frac{96·03}{100} = 9246.$$

and so on throughout.

(30)

If the above table were continued till one or other member of all the pairs of lives had ceased to exist, we could determine the value of joint life annuities in the same way as we calculated the values of annuities on single lives on p. 26. Joint life annuity values are given on pp. 156–165 according to the Northampton, Carlisle, Government Experience (1883), and Institute of Actuaries, Healthy Males Tables. For the most part they are given at every five years of age for both lives. To give them for every year of age would take up a great deal of room. They may, however, be found for every year of age, according to the Government Experience, in ' Joint Life Annuity Tables,' published by the Institute of Actuaries ; according to the Healthy Males Table in the ' Institute of Actuaries Life Tables ; ' and according to the Carlisle Table in ' Jones on Annuities.'

The single payment to secure £1 at the cessation of the joint life—that is to say, at the death of either of two lives—is given according to the Northampton, Carlisle, and Healthy Males Tables on pp. 166–169. The figures in these tables may readily be found by means of conversion tables from the tables of joint life annuities, as already mentioned and as hereafter explained. By the use of these tables the annual payments during the joint continuance of two lives to secure £1 at the first death can also be obtained by inspection by the use of conversion tables. They are given according to the Institute of Actuaries Table on p. 170.

Survivorship Benefits

On pp. 171–173 are given the values of annuities during the continuance of either of two lives. These differ from the joint life tables just considered, inasmuch as joint life annuities are payable only so long as *both* persons exist, and the last survivor annuities are payable so long as *either* of the two persons lives. If we have tables of joint life annuities and of single life annuities we can readily find the values of annuities payable during the continuance of either of two lives.

If we undertake to pay £1 per annum to each of two lives we can tell the value of that undertaking from the single annuity values given on pp. 138–145. Suppose the lives to be 30 and 60, then the value of the annuity on the life aged 30 by the Carlisle Table at 3 % is £19·556, and on the life aged 60 £10·491, the value of the two together being £30·047. To pay these annuities would involve paying £2 per annum so long as both persons were alive, and £1 per annum to the survivor of the two. But the annuities we are now considering, those given on p. 172, only require £1 per annum to be paid during the joint continuance of the two lives, and

£1 per annum to the survivor of the two. The difference between these two arrangements is, therefore, £1 per annum during their joint lives, and from the joint life annuity tables on p. 157 we know the value of this to be £9·529. Hence we get the rule that to find the value of an annuity on the survivor of two lives we must take the value of an annuity on each of the single lives, and deduct from the sum of these two the value of an annuity on the two joint lives. Thus according to the Carlisle Table at 3 % the value of an annuity

					£
On a life age 50 is (p. 140)	.	.	.	.	14·303
On a life age 70 is (p. 141)	.	.	.	.	7·123
On the two single lives is	.	.	.	.	21·426
On the joint lives is (p. 157)	.	.	.	.	6·338
During the continuance of either of the two lives is (p. 172)					15·088

In this way survivorship annuities for other ages and by other tables than those given on pp. 171–173 may readily be arrived at.

The single payment to secure £1 at the death of the last of two lives is given on pp. 174–176. These amounts, like so many others, may be at once obtained by means of premium conversion tables.

The same remark applies to the annual payments to secure the same benefit, which are given on p. 177, it being noted that the annual payments have to be continued during the continuance of either of the two lives.

Reversions to Perpetuities

On p. 178 tne values of the Reversion to a Perpetuity on the death of the first and on the death of the last of two lives are given. It has already been explained (p. 28) how the value of a reversion to a perpetuity on the death of a single life may be obtained. Where two lives are concerned the process is exactly the same. Thus at 4 % the value of a perpetuity to be entered upon immediately is (p. 94) £25; the value of an annuity during the joint continuance of two lives, each aged 60, according to the Healthy Males Table at 4 %, is £6·779. Deducting this amount from the previous one we have (25·000 − 6·779=) £18·221, which is the amount given in the upper table on p. 178.

Similarly the value of an annuity during the continuance of either of two lives, each age 60, is, according to the Healthy Males Table at 4 % (p. 173), £12·139. Deducting this from the value of a perpetuity to be entered upon immediately, we have (25·000 − 12·139=) 12·861, which is the amount given in the lower table on p. 178.

Reversionary Annuities

In the upper table on p. 179 we have the value of an annuity during the life of y after the death of x. Thus, suppose a father to be age 45 and his son to be age 20, this table tells us the present value of the annuity to be entered upon by the son on the father's death and to continue during the time that the son survives the father. The value of the annuity on the son's life only is, by the Carlisle Table at 3 % (p. 140), £21·694. The joint life annuity is (p. 157) £14·207 ; the difference between the two is £7·487, which is the amount given on p. 179 as the value of an annuity during the life of y aged 20 after the death of x aged 45.

Owing to the facility with which this calculation can be made it is not worth while to give in the tables more than a few examples of the results.

In the lower table on p. 179 we have the value of an annuity during the life of y, who is *to be nominated* at the death of x. In the preceding case y is supposed to be alive now, and there is, of course, the possibility that he may die before x, with the result that he would never come into the annuity at all. In the present case, however, we have the certainty that y will be alive at the death of x. Thus, suppose we wish to ascertain the value of a next presentation to a living, we may take the age of the person to be presented at 25, and suppose the present incumbent to be 45 ; then the problem is to find the value of an annuity on the life of a man aged 25 who is to be nominated at the death of a man aged 45. According to the Carlisle Table at 3 %, the present value of £1 to be received at the death of a man aged 45 is (p. 146) £·50885, and the value of an annuity on a life aged 25 is (p. 140) £20·665. This, however, is the value of an annuity the first payment of which has to be made one year after purchase, but it is here supposed that the annuity is to be entered upon immediately, so that the first annuity payment of £1 must be added to the value of the annuity on the life aged 25, making it 21·665. The present value of this sum, payable at the death of a life aged 45, is therefore 21·665 × ·50885 = 11·024, which is the amount given on p. 179 as the value by the Carlisle Table at 3 % of an annuity during the life of y, aged 25, who is to be nominated at the death of x, aged 45, y, of course, being supposed to enter on the annuity immediately after the death of x. In using a next presentation to illustrate the point it is not implied that next presentations can now be sold. It may, however, at times still be useful to calculate their value, while in connection with appointments, leases on lives, and certain other kinds of property it may be convenient to know how to calculate the values of annuities on successive lives.

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Contingent Assurances

On pp. 180 and 181 we have the single payments to secure £1 at the death of x provided he dies before y. This is a somewhat more complicated matter to calculate than any that we have dealt with previously. To obtain it we must take the single premium for joint life assurance on the two lives, and add to it the value of an annuity on two joint lives, one a year younger than x, the other of the age of y, divided by the probability of a life one year younger than x living one year. Then take the value of an annuity on two joint lives, one the age of x, the other one year younger than y, divided by the chance of a life one year younger than y living one year, subtract this result from the former result, and divide by 2. This process may be more clearly apprehended by the following formula and example :—

$$A^1_{xy} = \frac{1}{2}\left(A_{xy} + \frac{a_{x-1:y}}{p_{x-1}} - \frac{a_{x:y-1}}{p_{y-1}}\right),$$

where A^1_{xy} = the single premium for an assurance on the life of x provided y be then alive.

A_{xy} = the single premium for an assurance payable at the first death of x or y.

$a_{x:y}$ = the value of a joint life annuity on x and y.

p_x = the probability of a life age x dying within a year.

As an example let $x = 30$ and $y = 50$, and let us employ the Healthy Males Table with interest at 3 %. Then :

$$A_{xy} = A_{30'50} = (\text{see p. 168}) \qquad \cdot6077$$

$$\frac{a_{x-1:y}}{p_{x-1}} = \frac{a_{29:50}}{p_{29}} = \frac{12\cdot5147}{\cdot992567} = 12\cdot6084$$

$$\text{By addition} = 13\cdot2161$$

$$\frac{a_{x:y-1}}{p_{y-1}} = \frac{a_{30:49}}{p_{49}} = \frac{12\cdot7333}{\cdot984780} = 12\cdot9301$$

$$\text{By subtraction} = 0\cdot2860$$

$$\text{Divided by } 2 = 0\cdot1430 = A^1_{xy}$$

which is the amount given on p. 181.

In the above example the values p_{x-1} or p_{29} and p_{y-1} or p_{49} are found on p. 134, and of A_{xy} on p. 168. The values of $a_{x-1:y}$ and $a_{x:y-1}$ = $a_{29'50}$ and $a_{30'49}$ are not given in this book.

Annuities on Three Lives

On pp. 182 and 183 the values of annuities for the joint continuance of three lives are given. Full tables for annuities on three lives would be very extensive, and it is therefore generally necessary to obtain them from the values of annuities on two joint lives by some such method as the following :—

Take the present value of the annuity on the joint lives of the two oldest, and find at what age the present value of an annuity on a single life will be equal thereto; the value of an annuity on the joint lives of the youngest of the three lives and the life of the age just found will be approximately the value of the annuity on the three lives. In general we shall be nearer the truth if we subtract ·05 from the value just found. The two-life tables given in this book are not sufficiently full to enable the calculation of three-life annuities to be made in very many cases.

On p. 184 is given the value of an annuity during the longest of three lives. The values are obtained by adding together the values of the annuities on each single life, and subtracting from the sum the value of the annuity on each pair of joint lives, then adding the value of the annuity on the three joint lives. In this table, as in the previous one, complete tables of annuities on two joint lives are necessary to enable these values to be calculated.

Premium Conversion Tables

Pages 185 and 186 contain short Premium Conversion Tables, by means of which the single and annual premiums to secure £1 at death may be found by inspection. On p. 142 we see that according to the Institute of Actuaries Table at 3 % the value of an annuity on a life aged 40 is £17·176, and on p. 148 we find the single payment to secure £1 at death is £·4706. This latter value may readily be found from the Single Premium Conversion Table on p. 185. Referring to the 3 % column, we find that the single premium corresponding to an annuity value of £17 is £·47573. The difference in the single premium corresponding to the decimal part of the annuity value is found from the lower table on p. 185, and must be subtracted from the premium corresponding to the annuity value of £17.

The difference corresponding to

·1	=	·00291
·07	=	·0204
·006	=	·017
·0002	=	·1
·1762	=	·00513

c 2

We thus have the single premium corresponding to an

annuity of £17	.	.	.	.	= ·47573
Subtract difference	.	.	.	.	= ·00513
Single premium for annuity of £17·1762					= ·47060

which is the amount given on p. 148.

The differences, as can be seen from the above example, vary with the position of the figures in them in relation to the decimal point.

Thus at 3 % :—

The difference for	·1		is	·00291
for	·01		it is	·000291
for	·001		it is	·0000291

and so on.

The explanation of this connection is very simple.

The annuity value designated a gives the present value of £1 per annum on the supposition that the first payment of the annuity has to be made one year hence, and that the last payment is to be made on the anniversary of the first which immediately *precedes* the death of the annuitant. If, however, one further annual payment is to be made *after* the death of the annuitant, and we know the value of an annuity on these conditions, the difference between the value of an annuity with the last payment *before* the death of the annuitant and that of an annuity providing for one payment *after* death will give the value of £1 to be received at death. The value of an annuity providing for this one extra payment is obtained by taking the present value of $1 + a$ due one year hence, which may be expressed by the formula $v(1 + a)$, where v is the value of £1 due one year hence. Clearly, after the first payment has been made on such an annuity as this, there still remains the same number of payments to make as under an ordinary annuity. Therefore, if we know the present value of the first payment of £1 which has to be made one year hence, and the present value of an ordinary annuity one year hence, we have the value of an annuity providing for one payment after the death of the annuitant.

Using the same example as before, we have :—

$$a \qquad = 17\text{·}1762 \text{ (see p. 142)}$$
$$1 + a \quad = 18\text{·}1762$$
$$v \qquad = \quad \text{·}97087 \text{ (see p. 123)}$$
$$v(1 + a) = 18\text{·}1762 \times \text{·}97087 = 17\text{·}6468$$
$$\text{Deduct } a \qquad\qquad\qquad 17\text{·}1762$$
$$v(1 + a) - a \qquad\qquad = \quad \text{·}4706$$

This amount $£\cdot4706$ is the single premium to secure $£1$ at death given on p. 148.

This table may be used to find the single premium for assurance on single lives, joint lives, the last survivor or survivors of any number of lives, and on successive lives; but not for contingent assurances.

The single premium for the assurance of $£1$ at death may very easily be found from the annuity value by a quite simple calculation even when no Conversion Table is available. We have just seen that $v(1 + a) - a = A$, or the single premium. Now v, which is the present value of $£1$ due 1 year hence, is equal to $1 - d$, where d is the discount on 1 for 1 year. Hence we find that $v(1 + a) - a = (1 - d)(1 + a) - a$, which is the same as $1 - d(1 + a)$. The value of d is given on p. 123 for various rates of interest. Therefore the single premium is at once found by adding 1 to the value of the annuity, multiplying it by the rate of discount d, and subtracting the result from unity. Thus, to refer again to the example given above, $1 + a = 18\cdot1762$, $d = \cdot02913$ (p. 123). Therefore $1 - d(1 + a) = 1 - \cdot02913 \times 18\cdot1762 = 1 - \cdot5294 = \cdot4706$, which is the value of the single premium previously found.

Page 186 gives a table for finding the annual premium payable throughout life for the assurance of $£1$ at death. The present value of all these annual payments is, of course, the same as the single premium to secure the same benefit, assuming the same Mortality Table and the same rate of interest to be employed in the calculations. Inasmuch as the annual premiums to be paid for assurance commence when the assurance is effected, so that the first premium has to be paid immediately, the number of annual premiums that have to be paid is one more than the number of annuity payments on the same life, since the first ordinary annuity payment is made one year after the annuity is taken, and the last is made prior to the death of the annuitant. Hence the single premium is the present value of an annuity the amount of which is the annual premium to secure $£1$ at death plus the extra premium that has to be paid when the assurance is effected. Thus the annuity value plus 1 multiplied by the annual premium equals the single premium. That is to say, $P(1 + a) = A$, where P is the annual premium, A the single premium, and a the annuity value. We may put this another way and say that the single premium divided by the annuity value plus 1 equals the annual premium or $P = \dfrac{A}{1 + a}$

We have just seen, however, that the single premium A can be expressed in terms of an annuity-value for $A = 1 - d(1 + a)$; hence

$$P = \frac{1 - d(1 + a)}{1 + a} = \frac{1}{1 + a} - d.$$

(37)

If, therefore, we wish to know the annual premium for the assurance of £1 at death on a life aged 40 according to the Actuaries Table at 3 % we have

$$1 + a = 18\cdot176 \text{ (p. 142)},$$
$$\frac{1}{1 + a} = \frac{1}{18\cdot176} = \cdot05502,$$

$\frac{1}{1 + a} - d = \cdot05502 - \cdot02913 = \cdot02589$, which is the annual payment during life to secure £1 at death given on p. 150.

If we make use of the Annual Premium Conversion Table on p. 186, we can only approximate to this result. The Conversion Table is only a short one and deals with the annuity value to the first decimal place. Looking on line '17 − 17·9,' column ·1, we find that the annual premium corresponding to an annuity value of 17·1 is ·0261, which is a larger amount than the true value. If we look on the same line in column ·2 we find the annual premium corresponding to an annuity value of 17·2 is ·0258, which is less than the true value. The annuity value being 17·176 is approximately ¾ of the way between these two amounts, so that if we take ¾ of their difference, which is ·0003 × ¾ equals ·0002, and subtract it from ·0261, we have ·0259, which corresponds very nearly with the annual premium given on p. 150.

In the Annual Premium Conversion Table we have no differences to deal with of the same kind as we have in the Single Premium Conversion Table. What we are concerned with in the Annual Premium Conversion Table is the variation in the rate of discount. If we want to know the annual premium to assure £1 at death on a life aged 40, according to the Hм Table, with interest at 4 % instead of at 3 %, as previously, we must take the 4 % annuity value from p. 142, where it is given as 15·135, find from p. 186 the annual premium corresponding to this annuity value, which is ·0329, and subtract from it ·0093 (difference p. 186), so obtaining ·0236 as the annual premium at 4 %, which corresponds fairly well with the amount given on p. 150. If a closer approximation to the truth is required it can be obtained, as mentioned above, by adding 1 to the annuity value, dividing unity by this amount, and subtracting the rate of discount given on p. 123. Thus, to repeat the last example, we have the annuity value 15·1347, which with 1 added amounts to 16·1347. Dividing unity by this amount, we have ·06198, and subtracting the rate of discount ·03846 we obtain ·02352, which is the exact amount given on p. 150. Repeating the calculation in connection with the symbols we have

$$P = \frac{1}{1 + a} - d = \frac{1}{16\cdot1347} - \cdot03846 = \cdot06198 - \cdot03846 = \cdot02352.$$

Annual premiums, like single premiums, may be obtained from annuity values in this way in connection with single lives, joint lives, the last survivor or survivors of any number of lives, and successive lives. The premiums for contingent assurances cannot be obtained in this way.

Post Office Annuities and Assurances

Hitherto we have been considering the values of annuities and other benefits on what may be called a theoretical basis. That is to say, we have been supposing deaths to occur in exact accordance with certain mortality tables, and interest to be earned at various specified rates.

We have now to consider the terms on which annuities and other benefits can be obtained from various Government Departments. Page 189 gives the cost of immediate life annuities of £1 per annum when purchased through the Post Office. A distinction is made between the cost of annuities on male and female lives, and the annuities are payable by half-yearly instalments on January 5 and July 5, or April 5 and October 10, according to the date of purchase, the first half-yearly instalment becoming due on the second quarterly day of payment next following the day of purchase. The table gives the cost of an annuity of £1, and an annuity of a larger amount costs a larger sum in exact proportion. For instance, an annuity of £10 a year would cost ten times the amount given in the table.

The cost of deferred life annuities under which the purchase money will be returned on application or on the death of the nominee if an instalment of the annuity shall not have become due, is given on p. 190. The annuities are payable half-yearly, the first payment of the annuity being made six months after the number of years they are deferred has expired. Thus the first payment under an annuity deferred 10 years will become due and payable on the second quarterly day of payment next following the expiration of ten years.

The Table of Annual Payments shows the amount of each annual payment that has to be made for a number of years exceeding by one the number of years the annuity is deferred. Thus if the annuity is deferred ten years, 11 payments have to be made; if it is deferred twenty years, 21 payments have to be made, and so on.

On p. 191 a corresponding table is given, showing the cost of deferred life annuities under which the purchase price is not returnable in the event of the life on which the annuity is granted ceasing before the first payment of the annuity becomes due.

Pages 192–194 give the premiums for life assurance effected through the Post Office. It will be noticed that the sum assured is sometimes payable at death and sometimes payable in various numbers of years after being effected or at death if previous. The annual premiums for life assurances given on p. 194 differ, in regard to assurances payable at a certain age, from the ordinary practice of life assurance companies. The great majority of life assurance offices, when they assure an amount payable at a specified age or at death if previous, only require as a maximum number of payments the difference between the age at entry and the age at maturity. Thus an endowment assurance effected by a man aged thirty, payable at age sixty or at death if previous, only calls for (60 − 30 =) 30 annual payments in the event of the assured surviving till the age of sixty, while Post Office assurance in such a case as this would require 31 annual premiums to be paid.

Government annuities are also granted by the National Debt Office, and are made chargeable upon the Consolidated Fund of the United Kingdom. Further particulars in connection with these annuities are given at the bottom of the table on p. 195.

Annuities and Assurances Granted by Life Offices

It is probable that any person wanting to purchase an annuity or to assure to the best advantage would go to a well-established life assurance company rather than to a Government department. He would obtain much better value for money by so doing, and the security offered by the best life offices is so ample and altogether beyond question that no advantage attaches to Government guarantee as compared with the guarantee of first-class life assurance companies. The rates given on p. 196 for annuities and assurances granted by British life offices are only the average rates. Many companies of the highest standing guarantee these benefits on terms much more favourable than the average.

Details for each company may be obtained from various publications, such as Whitaker's Almanack. They are also given, much more fully, in Bourne's 'Insurance Directory' and Bourne's 'Assurance Manual.'

INCOME TAX

The Income Tax Tables on pp. 198–204 require little explanation. The amounts are arrived at by multiplying the income by the pence in the tax per pound, and dividing the result by 12 and 20 to obtain the answer in pounds. Thus the income tax on £130

$$\text{at } 5d. = \frac{130 \times 5}{12} = 54 \quad 2 = 2 \quad 14 \quad 2 \,;$$

$$\text{at } 6d. = \frac{130 \times 6}{12} = 65 \quad 0 = 3 \quad 5 \quad 0 \,;$$

$$\text{at } 7d. = \frac{130 \times 7}{12} = 75 \quad 10 = 3 \quad 15 \quad 10 \,;$$

$$\text{at } 8d. = \frac{130 \times 8}{12} = 86 \quad 8 = 4 \quad 6 \quad 8 \,;$$

$$\text{at } 9d. = \frac{130 \times 9}{12} = 97 \quad 6 = 4 \quad 17 \quad 6.$$

If it is desired to find the income tax on other amounts than those quoted, may easily be done by addition. Thus the tax at 7d. on £1,493 is

		£	s.	d.
on 1,490	(p. 202)	43	9	2
on 3	(p. 198)		1	9
on 1,493		43	10	11

If the tax is desired at a rate not given in the tables, it can be obtained by addition or subtraction. Thus the tax on £680 at 11d. is

		£	s.	d.
on 680 at 6d.	(p. 200)	17	0	0
on 680 at 5d.	(p. 200)	14	3	4
on 680 at 11d.		31	3	4

LOGARITHMIC TABLES

On pp. 230–320 there are various logarithmic tables by means of which many calculations required to be made by users of this book can be performed with the greatest ease. These tables are fully explained on pp. 207–228, and with the explanation there given the logarithmic tables may readily be employed by people previously unacquainted with logarithms. It cannot be too strongly urged upon everybody who has calculations to make that logarithms offer a very short and at the same time quite simple means of performing calculations that without their aid frequently involve long and tedious processes.

EXAMPLES

On pp. 42–48 a collection of examples is given showing some of the many purposes to which the tables in this book may be applied. These, in conjunction with the explanations already given, will, it is hoped, make the use of the tables perfectly clear, and at the same time show how many results not specifically tabulated may be arrived at.

EXAMPLES

Amount of a Sum in Any Number of Years

(1) *Find the amount of £437 at the end of 35 years at $2\frac{1}{4}$%.*

$$1 \text{ in } 35 \text{ years} = 2\cdot17879$$
$$437 \text{ in } 35 \text{ years} = 2\cdot17879 \times 437 = £952\cdot13123$$

or

$$437 = \log 2\cdot640481$$
$$1 \text{ in } 35 \text{ years} = \log 0\cdot338216$$
$$437 \text{ in } 35 \text{ years} = \log 2\cdot978697 = £952\cdot13$$

(2) *Required, the amount of £625 in 127 years at $4\frac{1}{2}$%.*

$$1 \text{ in } 100 \text{ years} = 81\cdot58852$$
$$1 \text{ in } 27 \text{ ,, } = 3\cdot28201$$
$$1 \text{ in } 127 \text{ years} = 81\cdot58852 \times 3\cdot28201 = 267\cdot77434$$
$$625 \text{ ,, } 127 \text{ ,, } = 267\cdot77434 \times 625 = £167358\cdot96250$$

or

$$625 = \log 2\cdot795880$$
$$1 \text{ in } 127 \text{ years} = \log 0\cdot01911629 \times 127 = \log 2\cdot427769$$
$$625 \text{ in } 127 \text{ years} = \log 5\cdot223649 = £167359$$

(3) *Find the amount of £475 in 30 years at $2\frac{7}{10} = 2\cdot7$%.*

$$475 = \log 2\cdot676694$$
$$1 \text{ in } 30 \text{ years} = \log 0\cdot01157044 \times 30 = \log 0\cdot347113$$
$$475 \text{ in } 30 \text{ years} = \log 3\cdot023807 = £1056\cdot35$$

or

$$1 \text{ in } 30 \text{ years at } 2\cdot75 \text{ %} = 2\cdot25660$$
$$1 \text{ ,, ,, } 2\cdot5 \text{ %} = 2\cdot09757$$

$$\text{Difference} = 0\cdot15903 \div 5 = 0\cdot03181$$
$$1 \text{ in } 30 \text{ yrs. at } 2\cdot7 = 2\cdot25660 - 0\cdot03181 = 2\cdot22479$$
$$475 \text{ in } 30 \text{ years} = 2\cdot22479 \times 475 = £1056\cdot78 \text{ approximately}$$

(4) *Find the rate of interest at which £530 must be invested in order to amount to £3,000 in 80 years.*

If 530 amounts to 3,000

$$1 \quad ,, \quad ,, \quad \frac{3,000}{530} = 5\cdot66038$$

This is between 2 % and 2¼ %, but nearer 2¼ %.

or

$$3,000 = \log 3\cdot477121$$
$$530 = \log 2\cdot724276$$
$$1 \text{ in } 80 \text{ years} = \log 0\cdot752845$$
$$1 \text{ ,, } 1 \text{ year } = \log 0\cdot752845 \div 80 = \log 0\cdot009411 = 1\cdot0219$$

The rate of interest therefore is 2·19 %.

Present Value of a Sum to be Received in the Future

(5) *It is required to know the present value of £913 to be received at the end of 37 years, reckoning interest at 4 %.*

Present value of 1 in 37 years $\quad = \quad \cdot2343$

$\quad\quad ,, \quad\quad ,, \quad 913 = \cdot23430 \times 913 = £213\cdot9159$

or

$$913 = \log 2\cdot960471$$
$$1 \text{ in } 37 \text{ years} = \log 0\cdot - \log 0\cdot630234 = \log \bar{1}\cdot369766$$
$$913 \text{ in } 37 \text{ years} = \log 2\cdot330237 = £213\cdot92$$

(6) *Find the present value of £350 due in 30 years at 4⅛ %.*

$$350 = \log 2\cdot544068$$

P.V. of 1 in 30 yrs. $= \log 0\cdot - \log 0\cdot526650$

$$= \log \bar{1}\cdot473350$$

Present value of 350 in 30 years $= \log \bar{2}\cdot017418 = £104\cdot1$

or

Present value of 1 at 4 % $= \cdot30832$

$\quad ,, \quad\quad ,, \quad 1 ,, 4½ \% = \cdot26700$

Difference $= \cdot04132 \div 4 = \cdot01033$

Present value of 1 at 4⅛ $= \cdot30832 - \cdot01033 = \cdot29799$

$\quad ,, \quad\quad\quad ,, \quad 350 = \cdot29799 \times 350 = £104\cdot3$ approximately

(7) *At the end of 20 years an institution will enter into possession of a property which, it is agreed, will then be worth*

£5,000. *Meantime it receives no income, but must spend £100 upon the property at the end of 5 years, £100 in 10 years, and £100 in 15 years. Find the present value of the property, reckoning interest at 3 %.*

							See p.
Present value of	5,000 in 20 years	=	·55368 × 5000 =	2768·4			66
,,	,,	100 ,, 5 ,,	=	86·261			66
,,	,	100 ,, 10 ,,	=	74·409			66
,,	,,	100 ,, 15 ,,	=	64·186			66
,,	,,	expenditure	=	224·856	=	224·9	
,,	,,	property according to conditions =				£2543·5	

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(8) *Find the present value of £1,000 due at the end of 120 years at 2½ %.*

				See p.
P.V. of 1,000 due in 100 years = 84·65				63
,, 84·65 ,, 20 ,, = 84·65 × ·61027 = £51·659				62

or

$$1000 = \log 3·0$$

P.V. of 1 in 120 yrs. = log 0· − log 1·286864

(year 12 log r^n × 10) = log 2·713136 279

Present value of 1,000 in 120 years = log 1·713136 = £51·66 247

Amount of £1 per Annum

(9) *Find the amount of £93 per annum in 27 years at 3½ %.*

			See p.
Amount of £ 1 per annum in 27 years = £ 43·75906			68
,, £93 = 43·75906 × 93 = £4069·59258			

or

			See p.
	93 = log 1·968483		262
Amount of 1 in 27 years	= log 0·4033894		287
,, 1 p. a. ,,	= log 1·2376785		224 / 287
,, 93 p. a. in 27 years	= log 3·609551 = £4069·59		243

---

(10) *Find the amount of £735 per annum in 34 years at 2⅞ %.*

£735 p. a. in 34 years at 2⅞ % = log 4·6175421 = £41451·68 225

or

		See p.
£1 per annum at 3 % = 57·73018		66
£1 per annum at 2¾% = 55·10023		64
Difference = 2·62995		

£1 p.a. at $2\frac{3}{4}+\frac{1}{2}$ diff.$=55\cdot10023+1\cdot31497=56\cdot41520$
£735 at $2\frac{7}{8}\%$ $=56\cdot4152\times735$ $=£41465$ roughly.

The error here is considerable. Taking half the difference between $2\frac{3}{4}$ and 3% to obtain $2\frac{7}{8}\%$ is only a means of roughly approximating to the correct amount.

Present Value of Annuity

(11) *Find the present value of £47·25 per annum for 30 years at 5 %.*

P.V. of £1 per annum $=$ $15\cdot37245$
   ,,   £47·25 per annum$=15\cdot37245\times47\cdot25=£726\cdot348$

or

Log $1\cdot186743+\log 1\cdot674402 = \log 2\cdot861145=£726\cdot35$

---

(12) *Find the value of a lease yielding £137 per annum for 27 years to make 3 % and to get back the principal by the end of the term.*

£1 p.a. for 27 years$=£18\cdot32703$ or $18\cdot32703$ yrs. purchase
£137   ,,   ,, $=$ $18\cdot32703\times137=£2510\cdot8$
or

                   $137=\log 2\cdot136721$
       £1 p.a. for 27 years$=\log 1\cdot263092$

£137   ,,   ,, $=\log 3\cdot399813=£2510\cdot8$

---

(13) *Find the present value of £1 per annum for 75 years at 3·7 %.*

         Present value$=\log 1\cdot4023555=£25\cdot2555$

---

(14) *If leasehold property yielding a net annual income of £100 a year for 30 years is bought for £2,000, find the yield per cent.*

If £100 per annum costs £2,000, £1 per annum costs £20.
            This is seen to be between $2\frac{3}{4}$ and 3%
or

       £1 p.a. costs £20$=\log 1\cdot30103$
       $\log 0-\log 1\cdot30103=\log \overline{2}\cdot69897$
          $2\frac{7}{8}\%=\log 0-\log 2\cdot70069=\log \overline{1}\cdot29931=19\cdot92$
     This is very close to 20, and therefore the required rate is a trifle less than $2\frac{7}{8}\%$.

Present Value of a Perpetuity

(15) *Find the value of a perpetuity of £60 a year, reckoning interest at $3\frac{3}{8}$ %.*

$$29 \cdot 62963 \times 60 = \underline{1777 \cdot 7778}$$

(16) *Find the value of a property yielding £25 per annum for the next 15 years and £110 in perpetuity thereafter, reckoning interest at 3 %.*

Take the value of a perpetuity of £110 per annum and deduct the value of (110 − 25 =) £85 per annum for 15 years.

Perpetuity = 33 × 110 =   3666·666
P.V. of £85 p. a. for 15 years = 11·93794 × 85 =   1014·725

Value required = £2651·941

or

P.V. of £25 p. a. for 15 years = 11·93794 × 25 =   298·448
P.V. of perpetuity £110 deferred 15 years

= 21·39539 × 110 =   2353·493

Value required = £2651·941

(17) *Find the value of the reversion to a perpetuity of £496 per annum after 22 years at $2\frac{5}{8}$ %.*

Value of perpetuity of £1 at $2\frac{5}{8}$ % =   38·09524
P.V. of £1 p. a. for 22 years at $2\frac{1}{2}$ % = 16·76541
   ,,   ,,   ,, $2\frac{3}{4}$ % = 16·34350

Difference =   ·42191

P.V. at $2\frac{5}{8}$ % (= 16·34350 + ·21095) =   16·55445

Approximate P.V. of perpetuity of £1 p. a. at
$2\frac{5}{8}$ % deferred 22 years =   21·54079
Approximate P.V. of perpetuity of £496 p. a.
at $2\frac{5}{8}$ % deferred 22 years = 21·54079 × 496 = £10684

or

Value of perpetuity at
$2\frac{5}{8}$ % = 38·0952
P.V. of £1 p. a. for
22 years at $2\frac{5}{8}$ %
= log 1·2188635 = 16·5525

P.V. of perp. deferred
22 years = 21·5427 = log 1·333300
496 = log 2·695482

P.V. of perp. of £496
deferred 22 years at
$2\frac{5}{8}$ %   = log 4·028782 = £10685

Sinking Fund

(18) *Find the sum to be set aside annually to amount to £750 in 30 years reckoning interest at 4%.*

The sum to amount to   £1 =   £·01783

  ,,   ,,   £750 = ·01783 × 750 = £13·3725 p. a.

or   750 = log 2·875061

   Annuity   1 will buy = log 2·762154

   ,,   750   ,,   = log 1·637215 =   43·373

    Deduct 4% on 750 = ·04 × 750 =   30·000

  Annual sum to amount to £750 in 30 years = £13·373

Annuity a Given Sum will Purchase

(19) *Find the annuity for 35 years that may be bought for £1,573, reckoning interest at 3½%.*

       1573 = log 3·196729

   Annuity   1 will buy = log 2·698956

   ,,   1573   ,,   = log 1·895685 = £78·6475

or   20·00066 will buy an annuity of £1 p. a.

  1573 will buy an annuity of $\frac{1573}{20·00066}$ = £78·6474

Annuities and Assurances on Lives

(20) *Find the value of an annuity of £250 on the life of a male aged 45, according to the Government Experience Table at 3%.*

   Value of £ 1 p. a.   = £15·152

   ,,   £250   ,,   = 15·152 × 250 = £3788

---

(21) *Find the value of £1,500 to be received at the death of a male aged 50, according to the Healthy Males Table at 3½%.*

    ·52023 × 1500 = £780·345

---

(22) *Find the annual payment to secure £1,500 at the death of a male aged 50, according to the Healthy Males Table at 3½%.*

    ·03667 × 1500 = £55·005

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(23) *Find the value of the reversion to a perpetuity of £100 per annum at the death of a male aged 60, according to the Government Experience Table at 3%, and according to the Healthy Males Table at 3%.*

By *Government Experience* $22 \cdot 732 \times 100 = £2273 \cdot 2$

By *Healthy Males—*

     Value of a perpetuity of 100 =   3333·3

       ,,   100 p. a. for life   =   1023·6

       ,,   deferred perpetuity $= £2309 \cdot 7$

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(24) *Find value of annuity of £135 so long as two female lives, aged 25 and 45, both continue to live. Government Table* 3%.

$$14 \cdot 650 \times 135 = £1977 \cdot 75$$

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(25) *Find value of annuity of £250 so long as either of two male lives, aged 30 and 50, continue to live. Healthy Males Table* $3\frac{1}{2}$%.

$$19 \cdot 7251 \times 250 = £4931 \cdot 275$$

---

(26) *Find the single payment to secure £1,250 (a) at the death of the first and (b) at the death of the last of two male lives, aged 45 and 60. Healthy Males Table* 4%.

     (a) At death of first $\cdot 64328 \times 1250 = £804 \cdot 1$

     (b)   ,,   ,,   last $\cdot 3814 \times 1250 = £476 \cdot 75$

Single and Annual Premiums by Conversion Tables

(27) *Find the single payment to secure £1,000 at death of a person aged 43. Northampton Table* 3%.

          Annuity on life aged 43 =   14·162

Single payment for annuity of 14   =   ·56311

   ,,   ,,   ,,   ·1   = 00291

   ,,   ,,   ,,   ·06 = 001748

   ,,   ,,   ,,   ·002 = 000058   ·00472

   ,,   ,,   ,,   14·162   =   ·55839

       Single payment to secure 1,000 $= £558 \cdot 39$

or

$$1000 \left[1 - \cdot 029126 \left(14 \cdot 162 + 1 \right) \right] = £558 \cdot 3916$$

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(28) *Find the annual payment to secure £1,000 at the death of a person aged 43. Carlisle Table* 4%.

       Annuity on life aged 43 = 14·505

Annual premium for annuity of 14·5 = ·0354 — ·0093 = ·0261

    ,,   ,,   £1,000 at death   = £26·1.

or $1000 \left(\dfrac{1}{14 \cdot 505 + 1} - \cdot 03846 \right) = 64 \cdot 50 - 38 \cdot 46 = £26 \cdot 04$

INTEREST TABLES

AMOUNT AND PRESENT VALUE

OF

ONE POUND

AND OF

ONE POUND PER ANNUM

VALUES OF PERPETUITIES AND REVERSIONS

NOMINAL AND EFFECTIVE RATES OF INTEREST

AND OTHER TABLES

For explanation see pp. 8–23

B

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·01000	·99010	1·00000	0·99010	1
2	1·02010	·98030	2·01000	1·97040	2
3	1·03030	·97059	3·03010	2·94099	3
4	1·04060	·96098	4·06040	3·90197	4
5	1·05101	·95147	5·10101	4·85343	5
6	1·06152	·94205	6·15202	5·79548	6
7	1·07214	·93272	7·21354	6·72819	7
8	1·08286	·92348	8·28567	7·65168	8
9	1·09369	·91434	9·36853	8·56602	9
10	1·10462	·90529	10·46221	9·47130	10
11	1·11567	·89632	11·56683	10·36763	11
12	1·12683	·88745	12·68250	11·25508	12
13	1·13809	·87866	13·80933	12·13374	13
14	1·14947	·86996	14·94742	13·00370	14
15	1·16097	·86135	16·09690	13·86505	15
16	1·17258	·85282	17·25786	14·71787	16
17	1·18430	·84438	18·43044	15·56225	17
18	1·19615	·83602	19·61475	16·39827	18
19	1·20811	·82774	20·81089	17·22601	19
20	1·22019	·81954	22·01900	18·04555	20
21	1·23239	·81143	23·23919	18·85698	21
22	1·24472	·80340	24·47159	19·66038	22
23	1·25716	·79544	25·71630	20·45582	23
24	1·26973	·78757	26·97346	21·24339	24
25	1·28243	·77977	28·24320	22·02316	25
26	1·29526	·77205	29·52563	22·79520	26
27	1·30821	·76440	30·82089	23·55961	27
28	1·32129	·75684	32·12910	24·31644	28
29	1·33450	·74934	33·45039	25·06579	29
30	1·34785	·74192	34·78489	25·80771	30
31	1·36133	·73458	36·13274	26·54229	31
32	1·37494	·72730	37·49407	27·26959	32
33	1·38869	·72010	38·86901	27·98969	33
34	1·40258	·71297	40·25770	28·70267	34
35	1·41660	·70591	41·66028	29·40858	35
36	1·43077	·69892	43·07688	30·10750	36
37	1·44508	·69200	44·50765	30·79951	37
38	1·45953	·68515	45·95272	31·48466	38
39	1·47412	·67837	47·41225	32·16303	39
40	1·48886	·67165	48·88637	32·83469	40
41	1·50375	·66500	50·37524	33·49969	41
42	1·51879	·65842	51·87899	34·15811	42
43	1·53398	·65190	53·39778	34·81001	43
44	1·54932	·64545	54·93176	35·45545	44
45	1·56481	·63906	56·48107	36·09451	45
46	1·58046	·63273	58·04588	36·72724	46
47	1·59626	·62646	59·62634	37·35370	47
48	1·61223	·62026	61·22261	37·97396	48
49	1·62835	·61412	62·83483	38·58808	49
50	1·64463	·60804	64·46318	39·19612	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	1·66108	·60202	66·10781	39·79814	51
52	1·67769	·59606	67·76889	40·39419	52
53	1·69447	·59016	69·44658	40·98435	53
54	1·71141	·58431	71·14105	41·56866	54
55	1·72852	·57853	72·85246	42·14719	55
56	1·74581	·57280	74·58098	42·71999	56
57	1·76327	·56713	76·32679	43·28712	57
58	1·78090	·56151	78·09006	43·84863	58
59	1·79871	·55595	79·87096	44·40459	59
60	1·81670	·55045	81·66967	44·95504	60
61	1·83486	·54500	83·48637	45·50004	61
62	1·85321	·53960	85·32123	46·03964	62
63	1·87174	·53426	87·17444	46·57390	63
64	1·89046	·52897	89·04619	47·10287	64
65	1·90937	·52373	90·93665	47·62661	65
66	1·92846	·51855	92·84601	48·14516	66
67	1·94774	·51341	94·77447	48·65857	67
68	1·96722	·50833	96·72222	49·16690	68
69	1·98689	·50330	98·68944	49·67020	69
70	2·00676	·49831	100·67634	50·16851	70
71	2·02683	·49338	102·68310	50·66190	71
72	2·04710	·48850	104·70993	51·15039	72
73	2·06757	·48366	106·75703	51·63405	73
74	2·08825	·47887	108·82460	52·11292	74
75	2·10913	·47413	110·91285	52·58705	75
76	2·13022	·46944	113·02197	53·05649	76
77	2·15152	·46479	115·15219	53·52127	77
78	2·17304	·46019	117·30372	53·98146	78
79	2·19477	·45563	119·47675	54·43709	79
80	2·21672	·45112	121·67152	54·88821	80
81	2·23888	·44665	123·88824	55·33486	81
82	2·26127	·44223	126·12712	55·77709	82
83	2·28388	·43785	128·38839	56·21494	83
84	2·30672	·43352	130·67227	56·64845	84
85	2·32979	·42922	132·97900	57·07768	85
86	2·35309	·42497	135·30879	57·50265	86
87	2·37662	·42077	137·66187	57·92342	87
88	2·40038	·41660	140·03849	58·34002	88
89	2·42439	·41248	142·43888	58·75249	89
90	2·44863	·40839	144·86327	59·16088	90
91	2·47312	·40435	147·31190	59·56523	91
92	2·49785	·40034	149·78502	59·96557	92
93	2·52283	·39638	152·28287	60·36195	93
94	2·54806	·39246	154·80570	60·75441	94
95	2·57354	·38857	157·35375	61·14298	95
96	2·59927	·38472	159·92729	61·52770	96
97	2·62527	·38091	162·52656	61·90862	97
98	2·65152	·37714	165·15183	62·28576	98
99	2·67803	·37341	167·80335	62·65917	99
100	2·70481	·36971	170·48138	63·02888	100

B 2

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·01250	·98765	1·00000	0·98765	1
2	1·02516	·97546	2·01250	1·96312	2
3	1·03797	·96342	3·03766	2·92653	3
4	1·05095	·95152	4·07563	3·87806	4
5	1·06408	·93978	5·12657	4·81783	5
6	1·07738	·92817	6·19065	5·74601	6
7	1·09085	·91672	7·26804	6·66273	7
8	1·10449	·90540	8·35889	7·56812	8
9	1·11829	·89422	9·46337	8·46234	9
10	1·13227	·88318	10·58167	9·34553	10
11	1·14642	·87228	11·71394	10·21780	11
12	1·16075	·86151	12·86036	11·07931	12
13	1·17526	·85087	14·02112	11·93018	13
14	1·18995	·84037	15·19638	12·77055	14
15	1·20483	·82999	16·38633	13·60055	15
16	1·21989	·81975	17·59116	14·42029	16
17	1·23514	·80963	18·81105	15·22992	17
18	1·25058	·79963	20·04619	16·02955	18
19	1·26621	·78976	21·29677	16·81931	19
20	1·28204	·78001	22·56298	17·59932	20
21	1·29806	·77038	23·84502	18·36969	21
22	1·31429	·76087	25·14308	19·13056	22
23	1·33072	·75147	26·45737	19·88204	23
24	1·34735	·74220	27·78808	20·62423	24
25	1·36419	·73303	29·13544	21·35727	25
26	1·38125	·72398	30·49963	22·08125	26
27	1·39851	·71505	31·88087	22·79630	27
28	1·41599	·70622	33·27938	23·50252	28
29	1·43369	·69750	34·69538	24·20002	29
30	1·45161	·68889	36·12907	24·88891	30
31	1·46976	·68038	37·58068	25·56929	31
32	1·48813	·67198	39·05044	26·24127	32
33	1·50673	·66369	40·53857	26·90496	33
34	1·52557	·65549	42·04530	27·56046	34
35	1·54464	·64740	43·57087	28·20786	35
36	1·56394	·63941	45·11551	28·84727	36
37	1·58349	·63152	46·67945	29·47878	37
38	1·60329	·62372	48·26294	30·10250	38
39	1·62333	·61602	49·88623	30·71852	39
40	1·64362	·60841	51·48956	31·32693	40
41	1·66416	·60090	53·13318	31·92784	41
42	1·68497	·59348	54·79734	32·52132	42
43	1·70603	·58616	56·48231	33·10748	43
44	1·72735	·57892	58·18834	33·68640	44
45	1·74895	·57177	59·91569	34·25817	45
46	1·77081	·56471	61·66464	34·82288	46
47	1·79294	·55774	63·43545	35·38062	47
48	1·81535	·55086	65·22839	35·93148	48
49	1·83805	·54406	67·04374	36·47554	49
50	1·86102	·53734	68·88179	37·01288	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	1·88429	·53071	70·74281	37·54358	51
52	1·90784	·52415	72·62710	38·06773	52
53	1·93169	·51768	74·53494	38·58542	53
54	1·95583	·51129	76·46662	39·09671	54
55	1·98028	·50498	78·42246	39·60169	55
56	2·00503	·49874	80·40274	40·10043	56
57	2·03010	·49259	82·40777	40·59302	57
58	2·05547	·48651	84·43787	41·07952	58
59	2·08117	·48050	86·49334	41·56002	59
60	2·10718	·47457	88·57451	42·03459	60
61	2·13352	·46871	90·68169	42·50330	61
62	2·16019	·46292	92·81521	42·96622	62
63	2·18719	·45721	94·97540	43·42343	63
64	2·21453	·45156	97·16259	43·87499	64
65	2·24221	·44599	99·37713	44·32098	65
66	2·27024	·44048	101·61934	44·76146	66
67	2·29862	·43504	103·88958	45·19651	67
68	2·32735	·42967	106·18820	45·62618	68
69	2·35644	·42437	108·51555	46·05055	69
70	2·38590	·41913	110·87200	46·46968	70
71	2·41572	·41395	113·25790	46·88363	71
72	2·44592	·40884	115·67362	47·29247	72
73	2·47649	·40380	118·11954	47·69627	73
74	2·50745	·39881	120·59604	48·09508	74
75	2·53879	·39389	123·10349	48·48897	75
76	2·57053	·38903	125·64228	48·87800	76
77	2·60266	·38422	128·21281	49·26222	77
78	2·63519	·37948	130·81547	49·64170	78
79	2·66813	·37479	133·45066	50·01649	79
80	2·70149	·37017	136·11880	50·38666	80
81	2·73525	·36560	138·82028	50·75225	81
82	2·76944	·36108	141·55554	51·11334	82
83	2·80406	·35663	144·32498	51·46996	83
84	2·83911	·35222	147·12904	51·82219	84
85	2·87460	·34787	149·96815	52·17006	85
86	2·91053	·34358	152·84276	52·51364	86
87	2·94692	·33934	155·75329	52·85298	87
88	2·98375	·33515	158·70021	53·18813	88
89	3·02105	·33101	161·68396	53·51914	89
90	3·05881	·32692	164·70501	53·84606	90
91	3·09705	·32289	167·76382	54·16895	91
92	3·13576	·31890	170·86087	54·48785	92
93	3·17496	·31496	173·99663	54·80282	93
94	3·21464	·31108	177·17159	55·11389	94
95	3·25483	·30724	180·38623	55·42113	95
96	3·29551	·30344	183·64106	55·72457	96
97	3·33671	·29970	186·93658	56·02427	97
98	3·37842	·29600	190·27328	56·32026	98
99	3·42065	·29234	193·65170	56·61261	99
100	3·46340	·28873	197·07234	56·90134	100

See also Tables on pp. xx–xxxi

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
I	1·01500	·98522	1·00000	0·98522	I
2	1·03023	·97066	2·01500	1·95588	2
3	1·04568	·95632	3·04523	2·91220	3
4	1·06136	·94218	4·09090	3·85438	4
5	1·07728	·92826	5·15227	4·78265	5
6	1·09344	·91454	6·22955	5·69719	6
7	1·10984	·90103	7·32299	6·59821	7
8	1·12649	·88771	8·43284	7·48593	8
9	1·14339	·87459	9·55933	8·36052	9
10	1·16054	·86167	10·70272	9·22219	10
11	1·17795	·84893	11·86326	10·07112	11
12	1·19562	·83639	13·04121	10·90751	12
13	1·21355	·82403	14·23683	11·73153	13
14	1·23176	·81185	15·45038	12·54338	14
15	1·25023	·79985	16·68214	13·34323	15
16	1·26899	·78803	17·93237	14·13126	16
17	1·28802	·77639	19·20136	14·90765	17
18	1·30734	·76491	20·48938	15·67256	18
19	1·32695	·75361	21·79672	16·42617	19
20	1·34686	·74247	23·12367	17·16864	20
21	1·36706	·73150	24·47052	17·90014	21
22	1·38756	·72069	25·83758	18·62083	22
23	1·40838	·71004	27·22515	19·33086	23
24	1·42950	·69954	28·63352	20·03041	24
25	1·45095	·68921	30·06302	20·71961	25
26	1·47271	·67902	31·51397	21·39863	26
27	1·49480	·66899	32·98668	22·06762	27
28	1·51722	·65910	34·48148	22·72672	28
29	1·53998	·64936	35·99870	23·37608	29
30	1·56308	·63976	37·53868	24·01584	30
31	1·58653	·63031	39·10176	24·64615	31
32	1·61032	·62099	40·68829	25·26714	32
33	1·63448	·61182	42·29862	25·87896	33
34	1·65900	·60277	43·93309	26·48173	34
35	1·68388	·59387	45·59209	27·07560	35
36	1·70914	·58509	47·27597	27·66068	36
37	1·73478	·57644	48·98511	28·23713	37
38	1·76080	·56792	50·71989	28·80505	38
39	1·78721	·55953	52·48068	29·36458	39
40	1·81402	·55126	54·26789	29·91585	40
41	1·84123	·54312	56·08191	30·45896	41
42	1·86885	·53509	57·92314	30·99405	42
43	1·89688	·52718	59·79199	31·52123	43
44	1·92533	·51939	61·68887	32·04062	44
45	1·95421	·51171	63·61420	32·55234	45
46	1·98353	·50415	65·56841	33·05649	46
47	2·01328	·49670	67·55194	33·55319	47
48	2·04348	·48936	69·56522	34·04255	48
49	2·07413	·48213	71·60870	34·52468	49
50	2·10524	·47500	73·68283	34·99969	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	2·13682	·46798	75·78807	35·46767	51
52	2·16887	·46107	77·92489	35·92874	52
53	2·20141	·45426	80·09376	36·38300	53
54	2·23443	·44754	82·29517	36·83054	54
55	2·26794	·44093	84·52962	37·27147	55
56	2·30196	·43441	86·79754	37·70588	56
57	2·33649	·42799	89·09951	38·13387	57
58	2·37154	·42167	91·43600	38·55554	58
59	2·40711	·41544	93·80754	38·97097	59
60	2·44322	·40930	96·21465	39·38027	60
61	2·47987	·40325	98·65787	39·78352	61
62	2·51707	·39729	101·13774	40·18080	62
63	2·55482	·39142	103·65481	40·57222	63
64	2·59314	·38563	106·20963	40·95785	64
65	2·63204	·37993	108·80277	41·33779	65
66	2·67152	·37432	111·43481	41·71211	66
67	2·71160	·36879	114·10634	42·08089	67
68	2·75227	·36334	116·81793	42·44423	68
69	2·79355	·35797	119·57020	42·80220	69
70	2·83546	·35268	122·36375	43·15487	70
71	2·87799	·34746	125·19921	43·50234	71
72	2·92116	·34233	128·07720	43·84467	72
73	2·96498	·33727	130·99836	44·18194	73
74	3·00945	·33229	133·96333	44·51422	74
75	3·05459	·32738	136·97278	44·84160	75
76	3·10041	·32254	140·02737	45·16414	76
77	3·14692	·31777	143·12778	45·48191	77
78	3·19412	·31308	146·27470	45·79499	78
79	3·24203	·30845	149·46882	46·10343	79
80	3·29066	·30389	152·71085	46·40732	80
81	3·34002	·29940	156·00152	46·70672	81
82	3·39012	·29497	159·34154	47·00170	82
83	3·44097	·29062	162·73166	47·29231	83
84	3·49259	·28632	166·17264	47·57863	84
85	3·54498	·28209	169·66523	47·86072	85
86	3·59815	·27792	173·21020	48·13864	86
87	3·65213	·27381	176·80836	48·41246	87
88	3·70691	·26977	180·46048	48·68222	88
89	3·76251	·26578	184·16739	48·94800	89
90	3·81895	·26185	187·92990	49·20985	90
91	3·87623	·25798	191·74885	49·46784	91
92	3·93438	·25417	195·62508	49·72201	92
93	3·99339	·25041	199·55946	49·97242	93
94	4·05329	·24671	203·55285	50·21913	94
95	4·11409	·24307	207·60614	50·46220	95
96	4·17580	·23947	211·72023	50·70168	96
97	4·23844	·23594	215·89604	50·93761	97
98	4·30202	·23245	220·13448	51·17006	98
99	4·36655	·22901	224·43650	51·39907	99
100	4·43205	·22563	228·80304	51·62470	100

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·01750	·98280	1·00000	0·98280	1
2	1·03531	·96590	2·01750	1·94870	2
3	1·05342	·94929	3·05281	2·89798	3
4	1·07186	·93296	4·10623	3·83094	4
5	1·09062	·91691	5·17809	4·74786	5
6	1·10970	·90114	6·26871	5·64900	6
7	1·12912	·88564	7·37841	6·53464	7
8	1·14888	·87041	8·50753	7·40505	8
9	1·16899	·85544	9·65641	8·26049	9
10	1·18944	·84073	10·82540	9·10122	10
11	1·21026	·82627	12·01484	9·92749	11
12	1·23144	·81206	13·22510	10·73955	12
13	1·25299	·79809	14·45654	11·53764	13
14	1·27492	·78436	15·70953	12·32201	14
15	1·29723	·77087	16·98445	13·09288	15
16	1·31993	·75762	18·28168	13·85050	16
17	1·34303	·74459	19·60161	14·59508	17
18	1·36653	·73178	20·94463	15·32686	18
19	1·39045	·71919	22·31117	16·04606	19
20	1·41478	·70682	23·70161	16·75288	20
21	1·43954	·69467	25·11639	17·44755	21
22	1·46473	·68272	26·55593	18·13027	22
23	1·49036	·67098	28·02065	18·80125	23
24	1·51644	·65944	29·51102	19·46069	24
25	1·54298	·64810	31·02746	20·10878	25
26	1·56998	·63695	32·57044	20·74573	26
27	1·59746	·62599	34·14042	21·37173	27
28	1·62541	·61523	35·73788	21·98695	28
29	1·65386	·60465	37·36329	22·59160	29
30	1·68280	·59425	39·01715	23·18585	30
31	1·71225	·58403	40·69995	23·76988	31
32	1·74221	·57398	42·41220	24·34386	32
33	1·77270	·56411	44·15441	24·90797	33
34	1·80372	·55441	45·92712	25·46238	34
35	1·83529	·54487	47·73084	26·00725	35
36	1·86741	·53550	49·56613	26·54275	36
37	1·90009	·52629	51·43354	27·06904	37
38	1·93334	·51724	53·33362	27·58628	38
39	1·96717	·50834	55·26696	28·09463	39
40	2·00160	·49960	57·23413	28·59423	40
41	2·03663	·49101	59·23573	29·08524	41
42	2·07227	·48256	61·27236	29·56780	42
43	2·10853	·47426	63·34462	30·04207	43
44	2·14543	·46611	65·45315	30·50817	44
45	2·18298	·45809	67·59858	30·96626	45
46	2·22118	·45021	69·78156	31·41647	46
47	2·26005	·44247	72·00274	31·85894	47
48	2·29960	·43486	74·26278	32·29380	48
49	2·33984	·42738	76·56238	32·72118	49
50	2·38079	·42003	78·90222	33·14121	50

For explanation see pp. 8-13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	2·42245	·41280	81·28301	33·55401	51
52	2·46485	·40570	83·70547	33·95972	52
53	2·50798	·39873	86·17031	34·35845	53
54	2·55187	·39187	88·67829	34·75032	54
55	2·59653	·38513	91·23016	35·13545	55
56	2·64197	·37851	93·82669	35·51395	56
57	2·68820	·37200	96·46866	35·88595	57
58	2·73524	·36560	99·15686	36·25155	58
59	2·78311	·35931	101·89210	36·61086	59
60	2·83182	·35313	104·67522	36·96399	60
61	2·88137	·34706	107·50703	37·31104	61
62	2·93180	·34109	110·38841	37·65213	62
63	2·98310	·33522	113·32020	37·98735	63
64	3·03531	·32946	116·30331	38·31681	64
65	3·08843	·32379	119·33861	38·64060	65
66	3·14247	·31822	122·42704	38·95882	66
67	3·19747	·31275	125·56951	39·27157	67
68	3·25342	·30737	128·76698	39·57893	68
69	3·31036	·30208	132·02040	39·88102	69
70	3·36829	·29689	135·33076	40·17790	70
71	3·42723	·29178	138·69905	40·46968	71
72	3·48721	·28676	142·12628	40·75645	72
73	3·54824	·28183	145·61349	41·03828	73
74	3·61033	·27698	149·16173	41·31526	74
75	3·67351	·27222	152·77206	41·58748	75
76	3·73780	·26754	156·44557	41·85502	76
77	3·80321	·26294	160·18336	42·11795	77
78	3·86977	·25841	163·98657	42·37636	78
79	3·93749	·25397	167·85634	42·63033	79
80	4·00639	·24960	171·79382	42·87994	80
81	4·07650	·24531	175·80022	43·12524	81
82	4·14784	·24109	179·87672	43·36633	82
83	4·22043	·23694	184·02456	43·60328	83
84	4·29429	·23287	188·24499	43·83614	84
85	4·36944	·22886	192·53928	44·06501	85
86	4·44590	·22493	196·90872	44·28993	86
87	4·52371	·22106	201·35462	44·51099	87
88	4·60287	·21726	205·87833	44·72824	88
89	4·68342	·21352	210·48120	44·94176	89
90	4·76538	·20985	215·16462	45·15161	90
91	4·84877	·20624	219·93000	45·35785	91
92	4·93363	·20269	224·77877	45·56054	92
93	5·01997	·19920	229·71240	45·75974	93
94	5·10782	·19578	234·73237	45·95552	94
95	5·19720	·19241	239·84018	46·14793	95
96	5·28815	·18910	245·03739	46·33704	96
97	5·38070	·18585	250·32554	46·52288	97
98	5·47486	·18265	255·70624	46·70554	98
99	5·57067	·17951	261·18110	46·88505	99
100	5·66816	·17642	266·75177	47·06147	100

See also Tables on pp. xx–xxxi

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·02000	·98039	1·00000	·98039	1
2	1·04040	·96117	2·02000	1·94156	2
3	1·06121	·94232	3·06040	2·88388	3
4	1·08243	·92385	4·12161	3·80773	4
5	1·10408	·90573	5·20404	4·71346	5
6	1·12616	·88797	6·30812	5·60143	6
7	1·14869	·87056	7·43428	6·47199	7
8	1·17166	·85349	8·58297	7·32548	8
9	1·19509	·83676	9·75463	8·16224	9
10	1·21899	·82035	10·94972	8·98258	10
11	1·24337	·80426	12·16872	9·78685	11
12	1·26824	·78849	13·41209	10·57534	12
13	1·29361	·77303	14·68033	11·34837	13
14	1·31948	·75788	15·97394	12·10625	14
15	1·34587	·74301	17·29342	12·84926	15
16	1·37279	·72845	18·63928	13·57771	16
17	1·40024	·71416	20·01207	14·29187	17
18	1·42825	·70016	21·41231	14·99203	18
19	1·45681	·68643	22·84056	15·67846	19
20	1·48595	·67297	24·29737	16·35143	20
21	1·51567	·65978	25·78332	17·01121	21
22	1·54598	·64684	27·29898	17·65805	22
23	1·57690	·63416	28·84496	18·29220	23
24	1·60844	·62172	30·42186	18·91393	24
25	1·64061	·60953	32·03030	19·52346	25
26	1·67342	·59758	33·67090	20·12104	26
27	1·70689	·58586	35·34432	20·70690	27
28	1·74102	·57437	37·05121	21·28127	28
29	1·77584	·56311	38·79223	21·84438	29
30	1·81136	·55207	40·56808	22·39646	30
31	1·84759	·54125	42·37944	22·93770	31
32	1·88454	·53063	44·22703	23·46833	32
33	1·92223	·52023	46·11157	23·98856	33
34	1·96068	·51003	48·03380	24·49859	34
35	1·99989	·50003	49·99447	24·99862	35
36	2·03989	·49022	51·99436	25·48884	36
37	2·08068	·48061	54·03425	25·96945	37
38	2·12230	·47119	56·11494	26·44064	38
39	2·16474	·46195	58·23723	26·90259	39
40	2·20803	·45289	60·40198	27·35548	40
41	2·25220	·44401	62·61002	27·79949	41
42	2·29724	·43530	64·86222	28·23479	42
43	2·34319	·42677	67·15947	28·66156	43
44	2·39005	·41840	69·50265	29·07996	44
45	2·43785	·41020	71·89271	29·49016	45
46	2·48661	·40215	74·33056	29·89231	46
47	2·53634	·39427	76·81717	30·28658	47
48	2·58707	·38654	79·35352	30·67312	48
49	2·63881	·37896	81·94059	31·05208	49
50	2·69159	·37153	84·57940	31·42361	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	2·74542	·36424	87·27098	31·78785	51
52	2·80033	·35710	90·01640	32·14495	52
53	2·85633	·35010	92·81673	32·49505	53
54	2·91346	·34323	95·67307	32·83828	54
55	2·97173	·33650	98·58653	33·17479	55
56	3·03117	·32991	101·55826	33·50469	56
57	3·09179	·32344	104·58943	33·82813	57
58	3·15362	·31710	107·68121	34·14523	58
59	3·21670	·31088	110·83484	34·45610	59
60	3·28103	·30478	114·05154	34·76089	60
61	3·34665	·29881	117·33257	35·05969	61
62	3·41358	·29295	120·67922	35·35264	62
63	3·48186	·28720	124·09280	35·63984	63
64	3·55149	·28157	127·57466	35·92141	64
65	3·62252	·27605	131·12615	36·19746	65
66	3·69497	·27064	134·74868	36·46810	66
67	3·76887	·26533	138·44365	36·73343	67
68	3·84425	·26013	142·21252	36·99356	68
69	3·92114	·25503	146·05677	37·24859	69
70	3·99956	·25003	149·97791	37·49862	70
71	4·07955	·24513	153·97747	37·74374	71
72	4·16114	·24032	158·05702	37·98406	72
73	4·24436	·23561	162·21816	38·21967	73
74	4·32925	·23099	166·46252	38·45066	74
75	4·41584	·22646	170·79177	38·67711	75
76	4·50415	·22202	175·20761	38·89913	76
77	4·59424	·21766	179·71176	39·11679	77
78	4·68612	·21340	184·30599	39·33019	78
79	4·77984	·20921	188·99211	39·53940	79
80	4·87544	·20511	193·77195	39·74451	80
81	4·97295	·20109	198·64739	39·94560	81
82	5·07241	·19715	203·62034	40·14275	82
83	5·17385	·19328	208·69275	40·33603	83
84	5·27733	·18949	213·86660	40·52551	84
85	5·38288	·18577	219·14394	40·71129	85
86	5·49054	·18213	224·52681	40·89342	86
87	5·60035	·17856	230·01735	41·07198	87
88	5·71235	·17506	235·61770	41·24704	88
89	5·82660	·17163	241·33005	41·41867	89
90	5·94313	·16826	247·15665	41·58693	90
91	6·06200	·16496	253·09979	41·75189	91
92	6·18324	·16173	259·16178	41·91362	92
93	6·30690	·15856	265·34502	42·07217	93
94	6·43304	·15545	271·65192	42·22762	94
95	6·56170	·15240	278·08496	42·38002	95
96	6·69293	·14941	284·64666	42·52943	96
97	6·82679	·14648	291·33959	42·67591	97
98	6·96333	·14361	298·16638	42·81952	98
99	7·10259	·14079	305·12971	42·96032	99
100	7·24465	·13803	312·23230	43·09835	100

See also Tables on pp. xx–xxxi

$2\frac{1}{4}°/_0$

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·02250	·97800	1·00000	0·97800	1
2	1·04551	·95647	2·02250	1·93447	2
3	1·06903	·93543	3·06801	2·86990	3
4	1·09308	·91484	4·13704	3·78474	4
5	1·11768	·89471	5·23012	4·67945	5
6	1·14283	·87502	6·34780	5·55448	6
7	1·16854	·85577	7·49062	6·41025	7
8	1·19483	·83694	8·65916	7·24718	8
9	1·22171	·81852	9·85399	8·06571	9
10	1·24920	·80051	11·07571	8·86622	10
11	1·27731	·78290	12·32491	9·64911	11
12	1·30605	·76567	13·60222	10·41478	12
13	1·33544	·74882	14·90827	11·16360	13
14	1·36548	·73234	16·24371	11·89594	14
15	1·39621	·71623	17·60919	12·61217	15
16	1·42762	·70047	19·00540	13·31263	16
17	1·45974	·68505	20·43302	13·99768	17
18	1·49259	·66998	21·89276	14·66766	18
19	1·52617	·65523	23·38535	15·32290	19
20	1·56051	·64082	24·91152	15·96371	20
21	1·59562	·62672	26·47203	16·59043	21
22	1·63152	·61292	28·06765	17·20335	22
23	1·66823	·59944	29·69917	17·80279	23
24	1·70577	·58625	31·36740	18·38904	24
25	1·74415	·57335	33·07317	18·96238	25
26	1·78339	·56073	34·81732	19·52311	26
27	1·82352	·54839	36·60071	20·07150	27
28	1·86454	·53632	38·42422	20·60783	28
29	1·90650	·52452	40·28877	21·13235	29
30	1·94939	·51298	42·19526	21·64533	30
31	1·99325	·50169	44·14466	22·14702	31
32	2·03810	·49065	46·13791	22·63767	32
33	2·08396	·47986	48·17602	23·11753	33
34	2·13085	·46930	50·25998	23·58683	34
35	2·17879	·45897	52·39083	24·04580	35
36	2·22782	·44887	54·56962	24·49467	36
37	2·27794	·43899	56·79744	24·93366	37
38	2·32920	·42933	59·07539	25·36299	38
39	2·38160	·41989	61·40457	25·78288	39
40	2·43519	·41065	63·78618	26·19352	40
41	2·48998	·40161	66·22137	26·59513	41
42	2·54601	·39277	68·71135	26·98790	42
43	2·60329	·38413	71·25735	27·37203	43
44	2·66186	·37568	73·86064	27·74771	44
45	2·72176	·36741	76·52251	28·11512	45
46	2·78300	·35932	79·24426	28·47444	46
47	2·84561	·35142	82·02726	28·82586	47
48	2·90964	·34369	84·87287	29·16955	48
49	2·97511	·33612	87·78251	29·50567	49
50	3·04205	·32873	90·75762	29·83440	50

INTEREST TABLES

$2\frac{1}{4}$%

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	3·11049	·32149	93·79966	30·15589	51
52	3·18048	·31442	96·91016	30·47031	52
53	3·25204	·30750	100·09064	30·77781	53
54	3·32521	·30073	103·34267	31·07854	54
55	3·40003	·29412	106·66788	31·37265	55
56	3·47653	·28764	110·06791	31·66030	56
57	3·55475	·28131	113·54444	31·94161	57
58	3·63473	·27512	117·09919	32·21673	58
59	3·71651	·26907	120·73392	32·48580	59
60	3·80013	·26315	124·45043	32·74895	60
61	3·88564	·25736	128·25057	33·00631	61
62	3·97306	·25169	132·13621	33·25800	62
63	4·06246	·24616	136·10927	33·50416	63
64	4·15386	·24074	140·17173	33·74490	64
65	4·24733	·23544	144·32559	33·98034	65
66	4·34289	·23026	148·57292	34·21060	66
67	4·44061	·22519	152·91581	34·43580	67
68	4·54052	·22024	157·35642	34·65604	68
69	4·64268	·21539	161·89694	34·87143	69
70	4·74714	·21065	166·53962	35·08208	70
71	4·85395	·20602	171·28676	35·28810	71
72	4·96317	·20148	176·14071	35·48959	72
73	5·07484	·19705	181·10388	35·68664	73
74	5·18902	·19271	186·17871	35·87935	74
75	5·30577	·18847	191·36774	36·06783	75
76	5·42515	·18433	196·67351	36·25215	76
77	5·54722	·18027	202·09866	36·43242	77
78	5·67203	·17630	207·64588	36·60873	78
79	5·79965	·17242	213·31792	36·78115	79
80	5·93015	·16863	219·11757	36·94978	80
81	6·06357	·16492	225·04771	37·11470	81
82	6·20000	·16129	231·11129	37·27599	82
83	6·33950	·15774	237·31129	37·43373	83
84	6·48214	·15427	243·65080	37·58800	84
85	6·62799	·15088	250·13294	37·73888	85
86	6·77712	·14756	256·76093	37·88643	86
87	6·92961	·14431	263·53805	38·03074	87
88	7·08552	·14113	270·46766	38·17187	88
89	7·24495	·13803	277·55318	38·30990	89
90	7·40796	·13499	284·79813	38·44489	90
91	7·57464	·13202	292·20608	38·57691	91
92	7·74507	·12911	299·78072	38·70602	92
93	7·91933	·12627	307·52579	38·83230	93
94	8·09752	·12349	315·44512	38·95579	94
95	8·27971	·12078	323·54263	39·07657	95
96	8·46600	·11812	331·82234	39·19469	96
97	8·65649	·11552	340·28834	39·31021	97
98	8·85126	·11298	348·94483	39·42319	98
99	9·05041	·11049	357·79609	39·53368	99
100	9·25405	·10806	366·84650	39·64174	100

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·02500	·97561	1·00000	·97561	1
2	1·05062	·95181	2·02500	1·92742	2
3	1·07689	·92860	3·07562	2·85602	3
4	1·10381	·90595	4·15252	3·76197	4
5	1·13141	·88385	5·25633	4·64583	5
6	1·15969	·86230	6·38774	5·50812	6
7	1·18869	·84127	7·54743	6·34939	7
8	1·21840	·82075	8·73612	7·17014	8
9	1·24886	·80073	9·95452	7·97087	9
10	1·28008	·78120	11·20338	8·75206	10
11	1·31209	·76214	12·48347	9·51421	11
12	1·34489	·74356	13·79555	10·25776	12
13	1·37851	·72542	15·14044	10·98318	13
14	1·41297	·70773	16·51895	11·69091	14
15	1·44830	·69047	17·93193	12·38138	15
16	1·48451	·67363	19·38022	13·05500	16
17	1·52162	·65720	20·86473	13·71220	17
18	1·55966	·64117	22·38635	14·35336	18
19	1·59865	62553	23·94601	14·97889	19
20	1·63862	·61027	25·54466	15·58916	20
21	1·67958	·59539	27·18327	16·18455	21
22	1·72157	·58086	28·86286	16·76541	22
23	1·76461	·56670	30·58443	17·33211	23
24	1·80873	·55288	32·34904	17·88499	24
25	1·85394	·53939	34·15776	18·42438	25
26	1·90029	·52623	36·01171	18·95061	26
27	1·94780	·51340	37·91200	19·46401	27
28	1·99650	·50088	39·85980	19·96489	28
29	2·04640	·48866	41·85630	20·45355	29
30	2·09757	·47674	43·90270	20·93029	30
31	2·15000	·46511	46·00027	21·39540	31
32	2·20376	·45377	48·15028	21·84918	32
33	2·25885	·44270	50·35403	22·29188	33
34	2·31532	·43191	52·61289	22·72379	34
35	2·37321	·42137	54·92821	23·14516	35
36	2·43254	·41109	57·30141	23·55625	36
37	2·49335	·40107	59·73395	23·95732	37
38	2·55568	·39128	62·22730	24·34860	38
39	2·61957	·38174	64·78298	24·73034	39
40	2·68506	·37243	67·40256	25·10277	40
41	2·75219	·36335	70·08762	25·46612	41
42	2·82100	·35448	72·83981	25·82061	42
43	2·89152	·34584	75·66081	26·16645	43
44	2·96381	·33740	78·55232	26·50385	44
45	3·03790	·32917	81·51613	26·83302	45
46	3·11385	·32115	84·55403	27·15417	46
47	3·19169	·31331	87·66788	27·46748	47
48	3·27149	·30567	90·85958	27·77315	48
49	3·35328	·29822	94·13107	28·07137	49
50	3·43711	·29094	97·48435	28·36231	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	3·52304	·28385	100·92146	28·64616	51
52	3·61111	·27692	104·44449	28·92308	52
53	3·70139	·27017	108·05561	29·19325	53
54	3·79392	·26358	111·75700	29·45683	54
55	3·88877	·25715	115·55092	29·71398	55
56	3·98599	·25088	119·43969	29·96486	56
57	4·08564	·24476	123·42569	30·20962	57
58	4·18778	·23879	127·51133	30·44841	58
59	4·29248	·23296	131·69911	30·68137	59
60	4·39979	·22728	135·99159	30·90866	60
61	4·50978	·22174	140·39138	31·13040	61
62	4·62253	·21633	144·90116	31·34673	62
63	4·73809	·21106	149·52369	31·55778	63
64	4·85654	·20591	154·26179	31·76369	64
65	4·97796	·20089	159·11833	31·96458	65
66	5·10241	·19599	164·09629	32·16056	66
67	5·22997	·19121	169·19869	32·35177	67
68	5·36072	·18654	174·42866	32·53831	68
69	5·49473	·18199	179·78938	32·72030	69
70	5·63210	·17755	185·28411	32·89786	70
71	5·77291	·17322	190·91622	33·07108	71
72	5·91723	·16900	196·68912	33·24008	72
73	6·06516	·16488	202·60635	33·40495	73
74	6·21679	·16085	208·67151	33·56581	74
75	6·37221	·15693	214·88829	33·72274	75
76	6·53151	·15310	221·26050	33·87584	76
77	6·69480	·14937	227·79201	34·02521	77
78	6·86217	·14573	234·48681	34·17094	78
79	7·03372	·14217	241·34898	34·31311	79
80	7·20957	·13870	248·38271	34·45182	80
81	7·38981	·13532	255·59228	34·58714	81
82	7·57455	·13202	262·98209	34·71916	82
83	7·76392	·12880	270·55664	34·84796	83
84	7·95801	·12566	278·32056	34·97362	84
85	8·15696	·12259	286·27857	35·09621	85
86	8·36089	·11960	294·43553	35·21582	86
87	8·56991	·11669	302·79642	35·33251	87
88	8·78416	·11384	311·36633	35·44635	88
89	9·00376	·11106	320·15049	35·55741	89
90	9·22886	·10836	329·15425	35·66577	90
91	9·45958	·10571	338·38311	35·77148	91
92	9·69607	·10313	347·84269	35·87462	92
93	9·93847	·10062	357·53875	35·97523	93
94	10·18693	·09817	367·47722	36·07340	94
95	10·44160	·09577	377·66415	36·16917	95
96	10·70264	·09343	388·10576	36·26261	96
97	10·97021	·09116	398·80840	36·35376	97
98	11·24447	·08893	409·77861	36·44269	98
99	11·52558	·08676	421·02308	36·52946	99
100	11·81372	·08465	432·54865	36·61410	100

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·02750	·97324	1·00000	0·97324	1
2	1·05576	·94719	2·02750	1·92042	2
3	1·08479	·92184	3·08326	2·84226	3
4	1·11462	·89717	4·16805	3·73943	4
5	1·14527	·87315	5·28267	4·61258	5
6	1·17677	·84978	6·42794	5·46237	6
7	1·20913	·82704	7·60471	6·28941	7
8	1·24238	·80491	8·81384	7·09431	8
9	1·27655	·78336	10·05622	7·87768	9
10	1·31165	·76240	11·33276	8·64008	10
11	1·34772	·74199	12·64442	9·38207	11
12	1·38478	·72213	13·99214	10·10420	12
13	1·42287	·70281	15·37692	10·80701	13
14	1·46199	·68400	16·79979	11·49101	14
15	1·50220	·66569	18·26178	12·15670	15
16	1·54351	·64787	19·76398	12·80457	16
17	1·58596	·63053	21·30749	13·43511	17
18	1·62957	·61366	22·89344	14·04877	18
19	1·67438	·59723	24·52301	14·64600	19
20	1·72043	·58125	26·19740	15·22725	20
21	1·76774	·56569	27·91783	15·79295	21
22	1·81635	·55055	29·68557	16·34350	22
23	1·86630	·53582	31·50192	16·87932	23
24	1·91763	·52148	33·36822	17·40080	24
25	1·97036	·50752	35·28585	17·90832	25
26	2·02455	·49394	37·25621	18·40226	26
27	2·08022	·48072	39·28075	18·88297	27
28	2·13743	·46785	41·36098	19·35083	28
29	2·19621	·45533	43·49840	19·80616	29
30	2·25660	·44314	45·69461	20·24930	30
31	2·31866	·43128	47·95121	20·68059	31
32	2·38242	·41974	50·26987	21·10033	32
33	2·44794	·40851	52·65229	21·50883	33
34	2·51526	·39757	55·10023	21·90641	34
35	2·58443	·38693	57·61548	22·29334	35
36	2·65550	·37658	60·19991	22·66992	36
37	2·72852	·36650	62·85541	23·03642	37
38	2·80356	·35669	65·58393	23·39311	38
39	2·88066	·34714	68·38749	23·74025	39
40	2·95987	·33785	71·26815	24·07810	40
41	3·04127	·32881	74·22802	24·40691	41
42	3·12491	·32001	77·26929	24·72692	42
43	3·21084	·31144	80·39419	25·03837	43
44	3·29914	·30311	83·60504	25·34147	44
45	3·38986	·29500	86·90417	25·63647	45
46	3·48309	·28710	90·29404	25·92357	46
47	3·57887	·27942	93·77712	26·20299	47
48	3·67729	·27194	97·35600	26·47493	48
49	3·77842	·26466	101·03329	26·73959	49
50	3·88232	·25758	104·81170	26·99717	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	3·98909	·25068	108·69402	27·24785	51
52	4·09879	·24397	112·68311	27·49183	52
53	4·21150	·23744	116·78189	27·72927	53
54	4·32732	·23109	120·99340	27·96036	54
55	4·44632	·22491	125·32071	28·18527	55
56	4·56859	·21889	129·76703	28·40415	56
57	4·69423	·21303	134·33563	28·61718	57
58	4·82332	·20733	139·02986	28·82451	58
59	4·95596	·20178	143·85318	29·02628	59
60	5·09225	·19638	148·80914	29·22266	60
61	5·23229	·19112	153·90139	29·41378	61
62	5·37618	·18601	159·13368	29·59979	62
63	5·52402	·18103	164·50986	29·78082	63
64	5·67593	·17618	170·03388	29·95700	64
65	5·83202	·17147	175·70981	30·12846	65
66	5·99240	·16688	181·54183	30·29534	66
67	6·15719	·16241	187·53423	30·45775	67
68	6·32651	·15806	193·69142	30·61582	68
69	6·50049	·15383	200·01793	30·76965	69
70	6·67926	·14972	206·51843	30·91937	70
71	6·86294	·14571	213·19768	31·06508	71
72	7·05167	·14181	220·06062	31·20689	72
73	7·24559	·13802	227·11229	31·34491	73
74	7·44484	·13432	234·35788	31·47923	74
75	7·64957	·13073	241·80272	31·60995	75
76	7·85994	·12723	249·45229	31·73718	76
77	8·07609	·12382	257·31223	31·86100	77
78	8·29818	·12051	265·38832	31·98151	78
79	8·52638	·11728	273·68649	32·09880	79
80	8·76085	·11414	282·21287	32·21294	80
81	9·00178	·11109	290·97373	32·32403	81
82	9·24933	·10812	299·97551	32·43214	82
83	9·50368	·10522	309·22483	32·53737	83
84	9·76503	·10241	318·72851	32·63977	84
85	10·03357	·09967	328·49355	32·73944	85
86	10·30950	·09700	338·52712	32·83644	86
87	10·59301	·09440	348·83662	32·93084	87
88	10·88431	·09188	359·42962	33·02271	88
89	11·18363	·08942	370·31394	33·11213	89
90	11·49118	·08702	381·49757	33·19915	90
91	11·80719	·08469	392·98876	33·28385	91
92	12·13189	·08243	404·79595	33·36628	92
93	12·46552	·08022	416·92783	33·44650	93
94	12·80832	·07807	429·39335	33·52457	94
95	13·16055	·07598	442·20167	33·60056	95
96	13·52246	·07395	455·36221	33·67451	96
97	13·89433	·07197	468·88467	33·74648	97
98	14·27642	·07005	482·77900	33·81652	98
99	14·66902	·06817	497·05542	33·88469	99
100	15·07242	·06635	511·72445	33·95104	100

See also Tables on pp. xx–xxxi

C

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
I	1·03000	·97087	1·00000	·97087	I
2	1·06090	·94260	2·03000	1·91347	2
3	1·09273	·91514	3·09090	2·82861	3
4	1·12551	·88849	4·18363	3·71710	4
5	1·15927	·86261	5·30914	4·57971	5
6	1·19405	·83748	6·46841	5·41719	6
7	1·22987	·81309	7·66246	6·23028	7
8	1·26677	·78941	8·89234	7·01969	8
9	1·30477	·76642	10·15911	7·78611	9
10	1·34392	·74409	11·46388	8·53020	10
11	1·38423	·72242	12·80780	9·25262	11
12	1·42576	·70138	14·19203	9·95400	12
13	1·46853	·68095	15·61779	10·63496	13
14	1·51259	·66112	17·08632	11·29607	14
15	1·55797	·64186	18·59891	11·93794	15
16	1·60471	·62317	20·15688	12·56110	16
17	1·65285	·60502	21·76159	13·16612	17
18	1·70243	·58739	23·41444	13·75351	18
19	1·75351	·57029	25·11687	14·32380	19
20	1·80611	·55368	26·87037	14·87748	20
21	1·86029	·53755	28·67649	15·41502	21
22	1·91610	·52189	30·53678	15·93692	22
23	1·97359	·50669	32·45288	16·44361	23
24	2·03279	·49193	34·42647	16·93554	24
25	2·09378	·47761	36·45926	17·41315	25
26	2·15659	·46369	38·55304	17·87684	26
27	2·22129	·45019	40·70963	18·32703	27
28	2·28793	·43708	42·93092	18·76411	28
29	2·35657	·42435	45·21885	19·18846	29
30	2·42726	·41199	47·57542	19·60044	30
31	2·50008	·39999	50·00268	20·00043	31
32	2·57508	·38834	52·50276	20·38877	32
33	2·65234	·37703	55·07784	20·76579	33
34	2·73191	·36604	57·73018	21·13184	34
35	2·81386	·35538	60·46208	21·48722	35
36	2·89828	·34503	63·27594	21·83225	36
37	2·98523	·33498	66·17422	22·16724	37
38	3·07478	·32523	69·15945	22·49246	38
39	3·16703	·31575	72·23423	22·80822	39
40	3·26204	·30656	75·40126	23·11477	40
41	3·35990	·29763	78·66330	23·41240	41
42	3·46070	·28896	82·02320	23·70136	42
43	3·56452	·28054	85·48389	23·98190	43
44	3·67145	·27237	89·04841	24·25427	44
45	3·78160	·26444	92·71986	24·51871	45
46	3·89504	·25674	96·50146	24·77545	46
47	4·01190	·24926	100·39650	25·02471	47
48	4·13225	·24200	104·40840	25·26671	48
49	4·25622	·23495	108·54065	25·50166	49
50	4·38391	·22811	112·79687	25·72976	50

For explanation see pp. 8–13

3%

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	4·51542	·22146	117·18077	25·95123	51
52	4·65089	·21501	121·69620	26·16624	52
53	4·79041	·20875	126·34708	26·37499	53
54	4·93412	·20267	131·13749	26·57766	54
55	5·08215	·19677	136·07162	26·77443	55
56	5·23461	·19104	141·15377	26·96546	56
57	5·39165	·18547	146·38838	27·15094	57
58	5·55340	·18007	151·78003	27·33101	58
59	5·72000	·17483	157·33343	27·50583	59
60	5·89160	·16973	163·05344	27·67556	60
61	6·06835	·16479	168·94504	27·84035	61
62	6·25040	·15999	175·01339	28·00034	62
63	6·43791	·15533	181·26379	28·15567	63
64	6·63105	·15081	187·70171	28·30648	64
65	6·82998	·14641	194·33276	28·45289	65
66	7·03488	·14215	201·16274	28·59504	66
67	7·24593	·13801	208·19762	28·73305	67
68	7·46331	·13399	215·44355	28·86704	68
69	7·68721	·13009	222·90686	28·99712	69
70	7·91782	·12630	230·59406	29·12342	70
71	8·15536	·12262	238·51189	29·24604	71
72	8·40002	·11905	246·66724	29·36509	72
73	8·65202	·11558	255·06726	29·48067	73
74	8·91158	·11221	263·71928	29·59288	74
75	9·17893	·10895	272·63086	29·70183	75
76	9·45429	·10577	281·80978	29·80760	76
77	9·73792	·10269	291·26407	29·91029	77
78	10·03006	·09970	301·00200	30·00999	78
79	10·33096	·09680	311·03206	30·10679	79
80	10·64089	·09398	321·36302	30·20076	80
81	10·96012	·09124	332·00391	30·29200	81
82	11·28892	·08858	342·96403	30·38059	82
83	11·62759	·08600	354·25295	30·46659	83
84	11·97642	·08350	365·88054	30·55009	84
85	12·33571	·08107	377·85695	30·63115	85
86	12·70578	·07870	390·19266	30·70986	86
87	13·08695	·07641	402·89844	30·78627	87
88	13·47956	·07419	415·98539	30·86045	88
89	13·88395	·07203	429·46495	30·93248	89
90	14·30047	·06993	443·34890	31·00241	90
91	14·72948	·06789	457·64937	31·07030	91
92	15·17137	·06591	472·37885	31·13621	92
93	15·62651	·06399	487·55022	31·20021	93
94	16·09530	·06213	503·17672	31·26234	94
95	16·57816	·06032	519·27203	31·32266	95
96	17·07551	·05856	535·85019	31·38122	96
97	17·58777	·05686	552·92569	31·43808	97
98	18·11540	·05520	570·51346	31·49328	98
99	18·65887	·05359	588·62887	31·54687	99
100	19·21863	·05203	607·28773	31·59891	100

c 2

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·03500	·96618	1·00000	·96618	1
2	1·07122	·93351	2·03500	1·89969	2
3	1·10872	·90194	3·10623	2·80164	3
4	1·14752	·87144	4·21494	3·67308	4
5	1·18769	·84197	5·36247	4·51505	5
6	1·22926	·81350	6·55015	5·32855	6
7	1·27228	·78599	7·77941	6·11454	7
8	1·31681	·75941	9·05169	6·87396	8
9	1·36290	·73373	10·36850	7·60769	9
10	1·41060	·70892	11·73139	8·31661	10
11	1·45997	·68495	13·14199	9·00155	11
12	1·51107	·66178	14·60196	9·66333	12
13	1·56396	·63940	16·11303	10·30274	13
14	1·61869	·61778	17·67699	10·92052	14
15	1·67535	·59689	19·29568	11·51741	15
16	1·73399	·57671	20·97103	12·09412	16
17	1·79467	·55720	22·70501	12·65132	17
18	1·85749	·53836	24·49969	13·18968	18
19	1·92250	·52016	26·35718	13·70984	19
20	1·98979	·50257	28·27968	14·21240	20
21	2·05943	·48557	30·26947	14·69797	21
22	2·13151	·46915	32·32890	15·16713	22
23	2·20611	·45329	34·46041	15·62041	23
24	2·28333	·43796	36·66653	16·05837	24
25	2·36324	·42315	38·94986	16·48152	25
26	2·44596	·40884	41·31310	16·89035	26
27	2·53157	·39501	43·75906	17·28537	27
28	2·62017	·38165	46·29063	17·66702	28
29	2·71188	·36875	48·91080	18·03577	29
30	2·80679	·35628	51·62267	18·39205	30
31	2·90503	·34423	54·42947	18·73628	31
32	3·00671	·33259	57·33450	19·06887	32
33	3·11194	·32134	60·34121	19·39021	33
34	3·22086	·31048	63·45315	19·70068	34
35	3·33359	·29998	66·67401	20·00066	35
36	3·45027	·28983	70·00760	20·29049	36
37	3·57102	·28003	73·45787	20·57053	37
38	3·69601	·27056	77·02889	20·84109	38
39	3·82537	·26141	80·72490	21·10250	39
40	3·95926	·25257	84·55028	21·35507	40
41	4·09783	·24403	88·50953	21·59910	41
42	4·24126	·23578	92·60737	21·83488	42
43	4·38970	·22781	96·84863	22·06269	43
44	4·54334	·22010	101·23833	22·28279	44
45	4·70236	·21266	105·78167	22·49545	45
46	4·86694	·20547	110·48403	22·70092	46
47	5·03728	·19852	115·35097	22·89944	47
48	5·21359	·19181	120·38826	23·09125	48
49	5·39606	·18532	125·60184	23·27657	49
50	5·58493	·17905	130·99791	23·45562	50

For explanation see pp. 8–13

$3\frac{1}{2}$%

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	5·78040	·17300	136·58283	23·62862	51
52	5·98271	·16714	142·36324	23·79577	52
53	6·19211	·16150	148·34595	23·95726	53
54	6·40883	·15603	154·53805	24·11330	54
55	6·63314	·15076	160·94689	24·26405	55
56	6·86530	·14566	167·58003	24·40971	56
57	7·10559	·14073	174·44533	24·55045	57
58	7·35428	·13598	181·55092	24·68642	58
59	7·61168	·13138	188·90520	24·81780	59
60	7·87809	·12693	196·51688	24·94474	60
61	8·15382	·12264	204·39497	25·06738	61
62	8·43921	·11849	212·54879	25·18587	62
63	8·73458	·11449	220·98800	25·30036	63
64	9·04029	·11062	229·72258	25·41097	64
65	9·35670	·10688	238·76287	25·51785	65
66	9·68418	·10326	248·11957	25·62111	66
67	10·02313	·09977	257·80376	25·72088	67
68	10·37394	·09640	267·82689	25·81728	68
69	10·73703	·09314	278·20083	25·91041	69
70	11·11282	·08999	288·93786	26·00040	70
71	11·50177	·08694	300·05069	26·08734	71
72	11·90434	·08400	311·55244	26·17134	72
73	12·32099	·08116	323·45680	26·25251	73
74	12·75222	·07842	335·77778	26·33092	74
75	13·19855	·07577	348·53001	26·40669	75
76	13·66050	·07320	361·72856	26·47989	76
77	14·13862	·07073	375·38906	26·55062	77
78	14·63347	·06834	389·52768	26·61896	78
79	15·14564	·06603	404·16115	26·68498	79
80	15·67574	·06379	419·30678	26·74878	80
81	16·22439	·06164	434·98252	26·81041	81
82	16·79224	·05955	451·20691	26·86996	82
83	17·37997	·05754	467·99915	26·92750	83
84	17·98827	·05559	485·37912	26·98309	84
85	18·61786	·05371	503·36739	27·03680	85
86	19·26948	·05190	521·98525	27·08870	86
87	19·94391	·05014	541·25474	27·13884	87
88	20·64195	·04845	561·19865	27·18729	88
89	21·36442	·04681	581·84060	27·23409	89
90	22·11217	·04522	603·20503	27·27932	90
91	22·88610	·04369	625·31720	27·32301	91
92	23·68711	·04222	648·20330	27·36523	92
93	24·51616	·04079	671·89042	27·40602	93
94	25·37423	·03941	696·40658	27·44543	94
95	26·26233	·03808	721·78082	27·48351	95
96	27·18151	·03679	748·04314	27·52029	96
97	28·13286	·03555	775·22465	27·55584	97
98	29·11751	·03434	803·35752	27·59018	98
99	30·13662	·03318	832·47503	27·62337	99
100	31·19141	·03206	862·61166	27·65543	100

| Years | ONE POUND | | ONE POUND PER ANNUM | | Years |
	Amount	Present Value	Amount	Present Value	
1	1·04000	·96154	1·00000	·96154	1
2	1·08160	·92456	2·04000	1·88609	2
3	1·12486	·88900	3·12160	2·77509	3
4	1·16986	·85480	4·24646	3·62990	4
5	1·21665	·82193	5·41632	4·45182	5
6	1·26532	·79031	6·63298	5·24214	6
7	1·31593	·75992	7·89829	6·00205	7
8	1·36857	·73069	9·21423	6·73275	8
9	1·42331	·70259	10·58280	7·43533	9
10	1·48024	·67556	12·00611	8·11090	10
11	1·53945	·64958	13·48635	8·76048	11
12	1·60103	·62460	15·02581	9·38507	12
13	1·66507	·60057	16·62684	9·98565	13
14	1·73168	·57748	18·29191	10·56312	14
15	1·80094	·55526	20·02359	11·11839	15
16	1·87298	·53391	21·82453	11·65230	16
17	1·94790	·51337	23·69751	12·16567	17
18	2·02582	·49363	25·64541	12·65930	18
19	2·10685	·47464	27·67123	13·13394	19
20	2·19112	·45639	29·77808	13·59033	20
21	2·27877	·43883	31·96920	14·02916	21
22	2·36992	·42196	34·24797	14·45112	22
23	2·46472	·40573	36·61789	14·85684	23
24	2·56330	·39012	39·08260	15·24696	24
25	2·66584	·37512	41·64591	15·62208	25
26	2·77247	·36069	44·31174	15·98277	26
27	2·88337	·34682	47·08421	16·32959	27
28	2·99870	·33348	49·96758	16·66306	28
29	3·11865	·32065	52·96629	16·98372	29
30	3·24340	·30832	56·08494	17·29203	30
31	3·37313	·29646	59·32834	17·58849	31
32	3·50806	·28506	62·70147	17·87355	32
33	3·64838	·27409	66·20953	18·14765	33
34	3·79432	·26355	69·85791	18·41120	34
35	3·94609	·25342	73·65222	18·66461	35
36	4·10393	·24367	77·59831	18·90828	36
37	4·26809	·23430	81·70225	19·14258	37
38	4·43881	·22529	85·97034	19·36787	38
39	4·61637	·21662	90·40915	19·58449	39
40	4·80102	·20829	95·02552	19·79277	40
41	4·99306	·20028	99·82654	19·99305	41
42	5·19278	·19257	104·81960	20·18563	42
43	5·40050	·18517	110·01238	20·37080	43
44	5·61652	·17805	115·41288	20·54884	44
45	5·84118	·17120	121·02939	20·72004	45
46	6·07482	·16461	126·87057	20·88465	46
47	6·31782	·15828	132·94539	21·04294	47
48	6·57053	·15219	139·26321	21·19513	48
49	6·83335	·14634	145·83373	21·34147	49
50	7·10668	·14071	152·66708	21·48219	50

For explanation see pp. 8–13

4%

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	7·39095	·13530	159·77377	21·61749	51
52	7·68659	·13010	167·16472	21·74758	52
53	7·99405	·12509	174·85131	21·87268	53
54	8·31381	·12028	182·84536	21·99296	54
55	8·64637	·11566	191·15917	22·10861	55
56	8·99222	·11121	199·80554	22·21982	56
57	9·35191	·10693	208·79776	22·32675	57
58	9·72599	·10282	218·14967	22·42957	58
59	10·11503	·09886	227·87566	22·52843	59
60	10·51963	·09506	237·99069	22·62349	60
61	10·94041	·09140	248·51031	22·71490	61
62	11·37803	·08789	259·45073	22·80278	62
63	11·83315	·08451	270·82875	22·88729	63
64	12·30648	·08126	282·66190	22·96855	64
65	12·79874	·07813	294·96838	23·04668	65
66	13·31068	·07513	307·76712	23·12181	66
67	13·84311	·07224	321·07780	23·19405	67
68	14·39684	·06946	334·92091	23·26351	68
69	14·97271	·06679	349·31775	23·33030	69
70	15·57162	·06422	364·29046	23·39452	70
71	16·19448	·06175	379·86208	23·45627	71
72	16·84226	·05937	396·05656	23·51564	72
73	17·51595	·05709	412·89892	23·57273	73
74	18·21659	·05490	430·41478	23·62763	74
75	18·94525	·05278	448·63137	23·68041	75
76	19·70307	·05075	467·57662	23·73116	76
77	20·49119	·04880	487·27969	23·77996	77
78	21·31084	·04692	507·77087	23·82689	78
79	22·16327	·04512	529·08171	23·87201	79
80	23·04980	·04338	551·24498	23·91539	80
81	23·97179	·04172	574·29478	23·95711	81
82	24·93066	·04011	598·26657	23·99722	82
83	25·92789	·03857	623·19723	24·03579	83
84	26·96500	·03709	649·12512	24·07287	84
85	28·04360	·03566	676·09012	24·10853	85
86	29·16535	·03429	704·13373	24·14282	86
87	30·33196	·03297	733·29908	24·17579	87
88	31·54524	·03170	763·63104	24·20749	88
89	32·80705	·03048	795·17628	24·23797	89
90	34·11933	·02931	827·98333	24·26728	90
91	35·48411	·02818	862·10267	24·29546	91
92	36·90347	·02710	897·58677	24·32256	92
93	38·37961	·02606	934·49024	24·34861	93
94	39·91479	·02505	972·86985	24·37367	94
95	41·51139	·02409	1012·78465	24·39776	95
96	43·17184	·02316	1054·29603	24·42092	96
97	44·89872	·02227	1097·46788	24·44319	97
98	46·69467	·02142	1142·36659	24·46461	98
99	48·56245	·02059	1189·06125	24·48520	99
100	50·50495	·01980	1237·62370	24·50500	100

See also Tables on pp. xx–xxxi

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·04500	·95694	1·00000	·95694	1
2	1·09203	·91573	2·04500	1·87267	2
3	1·14117	·87630	3·13702	2·74896	3
4	1·19252	·83856	4·27819	3·58753	4
5	1·24618	·80245	5·47071	4·38998	5
6	1·30226	·76790	6·71689	5·15787	6
7	1·36086	·73483	8·01915	5·89270	7
8	1·42210	·70319	9·38001	6·59589	8
9	1·48610	·67290	10·80211	7·26879	9
10	1·55297	·64393	12·28821	7·91272	10
11	1·62285	·61620	13·84118	8·52892	11
12	1·69588	·58966	15·46403	9·11858	12
13	1·77220	·56427	17·15991	9·68285	13
14	1·85194	·53997	18·93210	10·22283	14
15	1·93528	·51672	20·78405	10·73955	15
16	2·02237	·49447	22·71933	11·23401	16
17	2·11338	·47318	24·74170	11·70719	17
18	2·20848	·45280	26·85508	12·15999	18
19	2·30786	·43330	29·06356	12·59329	19
20	2·41171	·41464	31·37142	13·00794	20
21	2·52024	·39679	33·78314	13·40472	21
22	2·63365	·37970	36·30338	13·78442	22
23	2·75217	·36335	38·93703	14·14777	23
24	2·87601	·34770	41·68919	14·49548	24
25	3·00543	·33273	44·56521	14·82821	25
26	3·14068	·31840	47·57064	15·14661	26
27	3·28201	·30469	50·71132	15·45130	27
28	3·42970	·29157	53·99333	15·74287	28
29	3·58404	·27901	57·42303	16·02189	29
30	3·74532	·26700	61·00707	16·28889	30
31	3·91386	·25550	64·75238	16·54439	31
32	4·08998	·24450	68·66624	16·78889	32
33	4·27403	·23397	72·75622	17·02286	33
34	4·46636	·22390	77·03026	17·24676	34
35	4·66735	·21425	81·49662	17·46101	35
36	4·87738	·20503	86·16396	17·66604	36
37	5·09686	·19620	91·04134	17·86224	37
38	5·32622	·18775	96·13820	18·04999	38
39	5·56590	·17967	101·46442	18·22966	39
40	5·81636	·17193	107·03032	18·40158	40
41	6·07810	·16453	112·84668	18·56611	41
42	6·35161	·15744	118·92479	18·72355	42
43	6·63744	·15066	125·27640	18·87421	43
44	6·93612	·14417	131·91384	19·01838	44
45	7·24825	·13796	138·84996	19·15635	45
46	7·57442	·13202	146·09821	19·28837	46
47	7·91527	·12634	153·67263	19·41471	47
48	8·27145	·12090	161·58790	19·53561	48
49	8·64367	·11569	169·85935	19·65130	49
50	9·03264	·11071	178·50303	19·76201	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	9·43910	·10594	187·53566	19·86795	51
52	9·86386	·10138	196·97477	19·96933	52
53	10·30774	·09701	206·83863	20·06634	53
54	10·77159	·09284	217·14637	20·15918	54
55	11·25631	·08884	227·91796	20·24802	55
56	11·76284	·08501	239·17427	20·33303	56
57	12·29217	·08135	250·93711	20·41438	57
58	12·84532	·07785	263·22928	20·49224	58
59	13·42336	·07450	276·07459	20·56673	59
60	14·02741	·07129	289·49795	20·63802	60
61	14·65864	·06822	303·52536	20·70624	61
62	15·31828	·06528	318·18400	20·77152	62
63	16·00760	·06247	333·50228	20·83399	63
64	16·72794	·05978	349·50988	20·89377	64
65	17·48070	·05721	366·23783	20·95098	65
66	18·26733	·05474	383·71853	21·00572	66
67	19·08936	·05239	401·98586	21·05811	67
68	19·94838	·05013	421·07523	21·10824	68
69	20·84606	·04797	441·02362	21·15621	69
70	21·78413	·04590	461·86968	21·20211	70
71	22·76442	·04393	483·65381	21·24604	71
72	23·78882	·04204	506·41823	21·28808	72
73	24·85931	·04023	530·20706	21·32830	73
74	25·97798	·03849	555·06637	21·36680	74
75	27·14699	·03684	581·04436	21·40363	75
76	28·36861	·03525	608·19136	21·43888	76
77	29·64520	·03373	636·55997	21·47262	77
78	30·97923	·03228	666·20517	21·50490	78
79	32·37329	·03089	697·18440	21·53579	79
80	33·83009	·02956	729·55770	21·56534	80
81	35·35245	·02829	763·38779	21·59363	81
82	36·94331	·02707	798·74024	21·62070	82
83	38·60576	·02590	835·68355	21·64660	83
84	40·34302	·02479	874·28931	21·67139	84
85	42·15845	·02372	914·63233	21·69511	85
86	44·05558	·02270	956·79079	21·71781	86
87	46·03808	·02172	1000·84637	21·73953	87
88	48·10980	·02079	1046·88446	21·76032	88
89	50·27474	·01989	1094·99426	21·78021	89
90	52·53710	·01903	1145·26900	21·79924	90
91	54·90127	·01821	1197·80611	21·81746	91
92	57·37183	·01743	1252·70738	21·83489	92
93	59·95356	·01668	1310·07922	21·85156	93
94	62·65147	·01596	1370·03278	21·86753	94
95	65·47079	·01527	1432·68426	21·88280	95
96	68·41697	·01462	1498·15505	21·89742	96
97	71·49574	·01399	1566·57202	21·91140	97
98	74·71305	·01338	1638·06777	21·92479	98
99	78·07514	·01281	1712·78082	21·93760	99
100	81·58852	·01226	1790·85595	21·94985	100

See also Tables on pp. xx–xxxi

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·05000	·95238	1·00000	·95238	1
2	1·10250	·90703	2·05000	1·85941	2
3	1·15763	·86384	3·15250	2·72325	3
4	1·21551	·82270	4·31013	3·54595	4
5	1·27628	·78353	5·52563	4·32948	5
6	1·34010	·74622	6·80191	5·07569	6
7	1·40710	·71068	8·14201	5·78637	7
8	1·47746	·67684	9·54911	6·46321	8
9	1·55133	·64461	11·02656	7·10782	9
10	1·62889	·61391	12·57789	7·72173	10
11	1·71034	·58468	14·20679	8·30641	11
12	1·79586	·55684	15·91713	8·86325	12
13	1·88565	·53032	17·71298	9·39357	13
14	1·97993	·50507	19·59863	9·89864	14
15	2·07893	·48102	21·57856	10·37966	15
16	2·18287	·45811	23·65749	10·83777	16
17	2·29202	·43630	25·84037	11·27407	17
18	2·40662	·41552	28·13238	11·68959	18
19	2·52695	·39573	30·53900	12·08532	19
20	2·65330	·37689	33·06595	12·46221	20
21	2·78596	·35894	35·71925	12·82115	21
22	2·92526	·34185	38·50521	13·16300	22
23	3·07152	·32557	41·43048	13·48857	23
24	3·22510	·31007	44·50200	13·79864	24
25	3·38635	·29530	47·72710	14·09394	25
26	3·55567	·28124	51·11345	14·37518	26
27	3·73346	·26785	54·66913	14·64303	27
28	3·92013	·25509	58·40258	14·89813	28
29	4·11614	·24295	62·32271	15·14107	29
30	4·32194	·23138	66·43885	15·37245	30
31	4·53804	·22036	70·76079	15·59281	31
32	4·76494	·20987	75·29883	15·80268	32
33	5·00319	·19987	80·06377	16·00255	33
34	5·25335	·19035	85·06696	16·19290	34
35	5·51602	·18129	90·32031	16·37419	35
36	5·79182	·17266	95·83632	16·54685	36
37	6·08141	·16444	101·62814	16·71129	37
38	6·38548	·15661	107·70955	16·86789	38
39	6·70475	·14915	114·09502	17·01704	39
40	7·03999	·14205	120·79977	17·15909	40
41	7·39199	·13528	127·83976	17·29437	41
42	7·76159	·12884	135·23175	17·42321	42
43	8·14967	·12270	142·99334	17·54591	43
44	8·55715	·11686	151·14301	17·66277	44
45	8·98501	·11130	159·70016	17·77407	45
46	9·43426	·10600	168·68516	17·88007	46
47	9·90597	·10095	178·11942	17·98101	47
48	10·40127	·09614	188·02539	18·07716	48
49	10·92133	·09156	198·42666	18·16872	49
50	11·46740	·08720	209·34800	18·25592	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	12·04077	·08305	220·81540	18·33898	51
52	12·64281	·07910	232·85617	18·41807	52
53	13·27495	·07533	245·49897	18·49340	53
54	13·93870	·07174	258·77392	18·56514	54
55	14·63563	·06833	272·71262	18·63347	55
56	15·36741	·06507	287·34825	18·69854	56
57	16·13578	·06197	302·71566	18·76052	57
58	16·94257	·05902	318·85144	18·81954	58
59	17·78970	·05621	335·79402	18·87575	59
60	18·67919	·05354	353·58372	18·92929	60
61	19·61315	·05099	372·26290	18·98027	61
62	20·59380	·04856	391·87605	19·02883	62
63	21·62349	·04625	412·46985	19·07508	63
64	22·70467	·04404	434·09334	19·11912	64
65	23·83990	·04195	456·79801	19·16107	65
66	25·03190	·03995	480·63791	19·20102	66
67	26·28349	·03805	505·66981	19·23907	67
68	27·59766	·03623	531·95330	19·27530	68
69	28·97755	·03451	559·55096	19·30981	69
70	30·42643	·03287	588·52851	19·34268	70
71	31·94775	·03130	618·95494	19·37398	71
72	33·54513	·02981	650·90268	19·40379	72
73	35·22239	·02839	684·44782	19·43218	73
74	36·98351	·02704	719·67021	19·45922	74
75	38·83269	·02575	756·65372	19·48497	75
76	40·77432	·02453	795·48640	19·50949	76
77	42·81304	·02336	836·26072	19·53285	77
78	44·95369	·02225	879·07376	19·55510	78
79	47·20137	·02119	924·02745	19·57628	79
80	49·56144	·02018	971·22882	19·59646	80
81	52·03951	·01922	1020·79026	19·61568	81
82	54·64149	·01830	1072·82978	19·63398	82
83	57·37356	·01743	1127·47126	19·65141	83
84	60·24224	·01660	1184·84483	19·66801	84
85	63·25435	·01581	1245·08707	19·68382	85
86	66·41707	·01506	1308·34142	19·69887	86
87	69·73792	·01434	1374·75849	19·71321	87
88	73·22482	·01366	1444·49642	19·72687	88
89	76·88606	·01301	1517·72124	19·73987	89
90	80·73037	·01239	1594·60730	19·75226	90
91	84·76688	·01180	1675·33767	19·76406	91
92	89·00523	·01124	1760·10455	19·77529	92
93	93·45549	·01070	1849·10978	19·78599	93
94	98·12826	·01019	1942·56527	19·79618	94
95	103·03468	·00971	2040·69353	19·80589	95
96	108·18641	·00924	2143·72821	19·81513	96
97	113·59573	·00880	2251·91462	19·82394	97
98	119·27552	·00838	2365·51035	19·83232	98
99	125·23929	·00798	2484·78586	19·84030	99
100	131·50126	·00760	2610·02516	19·84791	100

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·06000	·94340	1·00000	·94340	1
2	1·12360	·89000	2·06000	1·83339	2
3	1·19102	·83962	3·18360	2·67301	3
4	1·26248	·79209	4·37462	3·46511	4
5	1·33823	·74726	5·63709	4·21236	5
6	1·41852	·70496	6·97532	4·91732	6
7	1·50363	·66506	8·39384	5·58238	7
8	1·59385	·62741	9·89747	6·20979	8
9	1·68948	·59190	11·49132	6·80169	9
10	1·79085	·55839	13·18079	7·36009	10
11	1·89830	·52679	14·97164	7·88687	11
12	2·01220	·49697	16·86994	8·38384	12
13	2·13293	·46884	18·88214	8·85268	13
14	2·26090	·44230	21·01507	9·29498	14
15	2·39656	·41727	23·27597	9·71225	15
16	2·54035	·39365	25·67253	10·10590	16
17	2·69277	·37136	28·21288	10·47726	17
18	2·85434	·35034	30·90565	10·82760	18
19	3·02560	·33051	33·75999	11·15812	19
20	3·20714	·31180	36·78559	11·46992	20
21	3·39956	·29416	39·99273	11·76408	21
22	3·60354	·27751	43·39229	12·04158	22
23	3·81975	·26180	46·99583	12·30338	23
24	4·04893	·24698	50·81558	12·55036	24
25	4·29187	·23300	54·86451	12·78336	25
26	4·54938	·21981	59·15638	13·00317	26
27	4·82235	·20737	63·70577	13·21053	27
28	5·11169	·19563	68·52811	13·40616	28
29	5·41839	·18456	73·63980	13·59072	29
30	5·74349	·17411	79·05819	13·76483	30
31	6·08810	·16425	84·80168	13·92909	31
32	6·45339	·15496	90·88978	14·08404	32
33	6·84059	·14619	97·34316	14·23023	33
34	7·25103	·13791	104·18375	14·36814	34
35	7·68609	·13011	111·43478	14·49825	35
36	8·14725	·12274	119·12087	14·62099	36
37	8·63609	·11579	127·26812	14·73678	37
38	9·15425	·10924	135·90421	14·84602	38
39	9·70351	·10306	145·05846	14·94907	39
40	10·28572	·09722	154·76197	15·04630	40
41	10·90286	·09172	165·04768	15·13802	41
42	11·55703	·08653	175·95054	15·22454	42
43	12·25045	·08163	187·50758	15·30617	43
44	12·98548	·07701	199·75803	15·38318	44
45	13·76461	·07265	212·74351	15·45583	45
46	14·59049	·06854	226·50812	15·52437	46
47	15·46592	·06466	241·09861	15·58903	47
48	16·39387	·06100	256·56453	15·65003	48
49	17·37750	·05755	272·95841	15·70757	49
50	18·42015	·05429	290·33590	15·76186	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	19·52536	·05122	308·75606	15·81308	51
52	20·69689	·04832	328·28142	15·86139	52
53	21·93870	·04558	348·97831	15·90697	53
54	23·25502	·04300	370·91701	15·94998	54
55	24·65032	·04057	394·17203	15·99054	55
56	26·12934	·03827	418·82235	16·02881	56
57	27·69710	·03610	444·95169	16·06492	57
58	29·35893	·03406	472·64879	16·09898	58
59	31·12046	·03213	502·00772	16·13111	59
60	32·98769	·03031	533·12818	16·16143	60
61	34·96695	·02860	566·11587	16·19003	61
62	37·06497	·02698	601·08282	16·21701	62
63	39·28887	·02545	638·14779	16·24246	63
64	41·64620	·02401	677·43666	16·26647	64
65	44·14497	·02265	719·08286	16·28912	65
66	46·79367	·02137	763·22783	16·31049	66
67	49·60129	·02016	810·02150	16·33065	67
68	52·57737	·01902	859·62279	16·34967	68
69	55·73201	·01794	912·20016	16·36792	69
70	59·07593	·01693	967·93217	16·38454	70
71	62·62049	·01597	1027·00810	16·40051	71
72	66·37772	·01507	1089·62859	16·41158	72
73	70·36038	·01421	1156·00630	16·42979	73
74	74·58200	·01341	1226·36668	16·44320	74
75	79·05692	·01265	1300·94868	16·45585	75
76	83·80034	·01193	1380·00560	16·46778	76
77	88·82836	·01126	1463·80594	16·47904	77
78	94·15806	·01062	1552·63429	16·48966	78
79	99·80754	·01002	1646·79235	16·49968	79
80	105·79599	·00945	1746·59989	16·50913	80
81	112·14375	·00892	1852·39588	16·51805	81
82	118·87238	·00841	1964·53964	16·52646	82
83	126·00472	·00794	2083·41202	16·53440	83
84	133·56500	·00749	2209·41674	16·54188	84
85	141·57890	·00706	2342·98174	16·54895	85
86	150·07364	·00666	2484·56065	16·55561	86
87	159·07806	·00629	2634·63428	16·56190	87
88	168·72274	·00593	2793·71234	16·56783	88
89	178·74010	·00559	2962·33508	16·57342	89
90	189·46451	·00528	3141·07519	16·57870	90
91	200·83238	·00498	3330·53970	16·58368	91
92	212·88232	·00470	3531·37208	16·58838	92
93	225·65526	·00443	3744·25441	16·59281	93
94	239·19458	·00418	3969·90967	16·59699	94
95	253·54625	·00394	4209·10425	16·60093	95
96	268·75903	·00372	4462·65050	16·60465	96
97	284·88457	·00351	4731·40953	16·60816	97
98	301·97765	·00331	5016·29411	16·61147	98
99	320·09631	·00312	5318·27175	16·61460	99
100	339·30208	·00295	5638·36806	16·61755	100

See also Tables on pp. xx–xxxi

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·07000	·93458	1·00000	·93458	1
2	1·14490	·87344	2·07000	1·80802	2
3	1·22504	·81630	3·21490	2·62432	3
4	1·31080	·76290	4·43994	3·38721	4
5	1·40255	·71299	5·75074	4·10020	5
6	1·50073	·66634	7·15329	4·76654	6
7	1·60578	·62275	8·65402	5·38929	7
8	1·71819	·58201	10·25980	5·97130	8
9	1·83846	·54393	11·97799	6·51523	9
10	1·96715	·50835	13·81645	7·02358	10
11	2·10485	·47509	15·78360	7·49867	11
12	2·25219	·44401	17·88845	7·94269	12
13	2·40985	·41496	20·14064	8·35765	13
14	2·57853	·38782	22·55049	8·74547	14
15	2·75903	·36245	25·12902	9·10791	15
16	2·95216	·33873	27·88805	9·44665	16
17	3·15882	·31657	30·84022	9·76322	17
18	3·37993	·29586	33·99903	10·05909	18
19	3·61653	·27651	37·37896	10·33560	19
20	3·86968	·25842	40·99549	10·59401	20
21	4·14056	·24151	44·86518	10·83553	21
22	4·43040	·22571	49·00574	11·06124	22
23	4·74053	·21095	53·43614	11·27219	23
24	5·07237	·19715	58·17667	11·46933	24
25	5·42743	·18425	63·24904	11·65358	25
26	5·80735	·17220	68·67647	11·82578	26
27	6·21387	·16093	74·48382	11·98671	27
28	6·64884	·15040	80·69769	12·13711	28
29	7·11426	·14056	87·34653	12·27767	29
30	7·61226	·13137	94·46079	12·40904	30
31	8·14511	·12277	102·07304	12·53181	31
32	8·71527	·11474	110·21815	12·64656	32
33	9·32534	·10723	118·93343	12·75379	33
34	9·97811	·10022	128·25876	12·85401	34
35	10·67658	·09366	138·23688	12·94767	35
36	11·42394	·08754	148·91346	13·03521	36
37	12·22362	·08181	160·33740	13·11702	37
38	13·07927	·07646	172·56102	13·19347	38
39	13·99482	·07146	185·64029	13·26493	39
40	14·97446	·06678	199·63511	13·33171	40
41	16·02267	·06241	214·60957	13·39412	41
42	17·14426	·05833	230·63224	13·45245	42
43	18·34435	·05451	247·77650	13·50696	43
44	19·62846	·05095	266·12085	13·55791	44
45	21·00245	·04761	285·74931	13·60552	45
46	22·47262	·04450	306·75176	13·65002	46
47	24·04571	·04159	329·22439	13·69161	47
48	25·72891	·03887	353·27009	13·73047	48
49	27·52993	·03632	378·99900	13·76680	49
50	29·45703	·03395	406·52893	13·80075	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	31·51902	·03173	435·98595	13·83247	51
52	33·72535	·02965	467·50497	13·86212	52
53	36·08612	·02771	501·23032	13·88984	53
54	38·61215	·02590	537·31644	13·91573	54
55	41·31500	·02420	575·92859	13·93994	55
56	44·20705	·02262	617·24359	13·96256	56
57	47·30155	·02114	661·45065	13·98370	57
58	50·61265	·01976	708·75219	14·00346	58
59	54·15554	·01847	759·36484	14·02192	59
60	57·94644	·01726	813·52038	14·03918	60
61	62·00267	·01613	871·46681	14·05531	61
62	66·34286	·01507	933·46949	14·07038	62
63	70·98686	·01409	999·81235	14·08447	63
64	75·95594	·01317	1070·79922	14·09764	64
65	81·27285	·01230	1146·75516	14·10994	65
66	86·96195	·01150	1228·02802	14·12144	66
67	93·04929	·01075	1314·98998	14·13219	67
68	99·56274	·01004	1408·03928	14·14223	68
69	106·53213	·00939	1507·60203	14·15162	69
70	113·98938	·00877	1614·13417	14·16039	70
71	121·96864	·00820	1728·12357	14·16859	71
72	130·50644	·00766	1850·09222	14·17625	72
73	139·64189	·00716	1980·59867	14·18341	73
74	149·41682	·00669	2120·24058	14·19010	74
75	159·87600	·00625	2269·65742	14·19636	75
76	171·06732	·00585	2429·53344	14·20220	76
77	183·04203	·00546	2600·60078	14·20767	77
78	195·85498	·00511	2783·64283	14·21277	78
79	209·56483	·00477	2979·49783	14·21755	79
80	224·23437	·00446	3189·06268	14·22201	80
81	239·93077	·00417	3413·29707	14·22617	81
82	256·72592	·00390	3653·22786	14·23007	82
83	274·69674	·00364	3909·95381	14·23371	83
84	293·92551	·00340	4184·65058	14·23711	84
85	314·50029	·00318	4478·57612	14·24029	85
86	336·51531	·00297	4793·07645	14·24326	86
87	360·07139	·00278	5129·59180	14·24604	87
88	385·27638	·00260	5489·66323	14·24863	88
89	412·24573	·00243	5874·93965	14·25106	89
90	441·10293	·00227	6287·18543	14·25333	90
91	471·98014	·00212	6728·28841	14·25545	91
92	505·01875	·00198	7200·26859	14·25743	92
93	540·37006	·00185	7705·28740	14·25928	93
94	578·19596	·00173	8245·65751	14·26101	94
95	618·66968	·00162	8823·85354	14·26262	95
96	661·97656	·00151	9442·52329	14·26413	96
97	708·31492	·00141	10104·49992	14·26555	97
98	757·89696	·00132	10812·81491	14·26686	98
99	810·94975	·00123	11570·71196	14·26810	99
100	867·71623	·00115	12381·66179	14·26925	100

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·08000	·92593	1·00000	·92593	1
2	1·16640	·85734	2·08000	1·78326	2
3	1·25971	·79383	3·24640	2·57710	3
4	1·36049	·73503	4·50611	3·31213	4
5	1·46933	·68058	5·86660	3·99271	5
6	1·58687	·63017	7·33593	4·62288	6
7	1·71382	·58349	8·92280	5·20637	7
8	1·85093	·54027	10·63663	5·74664	8
9	1·99900	·50025	12·48756	6·24689	9
10	2·15892	·46319	14·48656	6·71008	10
11	2·33164	·42888	16·64549	7·13896	11
12	2·51817	·39711	18·97713	7·53608	12
13	2·71962	·36770	21·49530	7·90378	13
14	2·93719	·34046	24·21492	8·24424	14
15	3·17217	·31524	27·15211	8·55948	15
16	3·42594	·29189	30·32428	8·85137	16
17	3·70002	·27027	33·75023	9·12164	17
18	3·99602	·25025	37·45024	9·37189	18
19	4·31570	·23171	41·44626	9·60360	19
20	4·66096	·21455	45·76196	9·81815	20
21	5·03383	·19866	50·42292	10·01680	21
22	5·43654	·18394	55·45676	10·20074	22
23	5·87146	·17032	60·89330	10·37106	23
24	6·34118	·15770	66·76476	10·52876	24
25	6·84848	·14602	73·10594	10·67478	25
26	7·39635	·13520	79·95442	10·80998	26
27	7·98806	·12519	87·35077	10·93516	27
28	8·62711	·11591	95·33883	11·05108	28
29	9·31727	·10733	103·96593	11·15841	29
30	10·06266	·09938	113·28321	11·25778	30
31	10·86767	·09202	123·34587	11·34980	31
32	11·73708	·08520	134·21354	11·43500	32
33	12·67605	·07889	145·95062	11·51389	33
34	13·69013	·07305	158·62667	11·58693	34
35	14·78534	·06763	172·31680	11·65457	35
36	15·96817	·06262	187·10215	11·71719	36
37	17·24563	·05799	203·07032	11·77518	37
38	18·62528	·05369	220·31595	11·82887	38
39	20·11530	·04971	238·94122	11·87858	39
40	21·72452	·04603	259·05652	11·92461	40
41	23·46248	·04262	280·78104	11·96723	41
42	25·33948	·03946	304·24352	12·00670	42
43	27·36664	·03654	329·58301	12·04324	43
44	29·55597	·03383	356·94965	12·07707	44
45	31·92045	·03133	386·50562	12·10840	45
46	34·47409	·02901	418·42607	12·13741	46
47	37·23201	·02686	452·90015	12·16427	47
48	40·21057	·02487	490·13216	12·18914	48
49	43·42742	·02303	530·34274	12·21216	49
50	46·90161	·02132	573·77016	12·23348	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	50·65374	·01974	620·67177	12·25323	51
52	54·70604	·01828	671·32551	12·27151	52
53	59·08252	·01693	726·03155	12·28843	53
54	63·80913	·01567	785·11408	12·30410	54
55	68·91386	·01451	848·92320	12·31861	55
56	74·42696	·01344	917·83706	12·33205	56
57	80·38112	·01244	992·26402	12·34449	57
58	86·81161	·01152	1072·64514	12·35601	58
59	93·75654	·01067	1159·45676	12·36668	59
60	101·25706	·00988	1253·21330	12·37655	60
61	109·35763	·00914	1354·47036	12·38570	61
62	118·10624	·00847	1463·82799	12·39416	62
63	127·55474	·00784	1581·93423	12·40200	63
64	137·75912	·00726	1709·48897	12·40926	64
65	148·77985	·00672	1847·24808	12·41598	65
66	160·68223	·00622	1996·02793	12·42221	66
67	173·53681	·00576	2156·71016	12·42797	67
68	187·41976	·00534	2330·24698	12·43330	68
69	202·41334	·00494	2517·66673	12·43824	69
70	218·60641	·00457	2720·08007	12·44282	70
71	236·09492	·00424	2938·68648	12·44705	71
72	254·98251	·00392	3174·78140	12·45098	72
73	275·38111	·00363	3429·76391	12·45461	73
74	297·41160	·00336	3705·14502	12·45797	74
75	321·20453	·00311	4002·55662	12·46108	75
76	346·90089	·00288	4323·76115	12·46397	76
77	374·65296	·00267	4670·66205	12·46664	77
78	404·62520	·00247	5045·31501	12·46911	78
79	436·99522	·00229	5449·94021	12·47139	79
80	471·95483	·00212	5886·93543	12·47351	80
81	509·71122	·00196	6358·89026	12·47548	81
82	550·48812	·00182	6868·60148	12·47729	82
83	594·52717	·00168	7419·08960	12·47897	83
84	642·08934	·00156	8013·61677	12·48053	84
85	693·45649	·00144	8655·70611	12·48197	85
86	748·93301	·00134	9349·16260	12·48331	86
87	808·84765	·00124	10098·09561	12·48455	87
88	873·55546	·00114	10906·94326	12·48569	88
89	943·43990	·00106	11780·49872	12·48675	89
90	1018·91509	·00098	12723·93862	12·48773	90
91	1100·42830	·00091	13742·85370	12·48864	91
92	1188·46256	·00084	14843·28200	12·48948	92
93	1283·53956	·00078	16031·74456	12·49026	93
94	1386·22273	·00072	17315·28413	12·49098	94
95	1497·12055	·00067	18701·50686	12·49165	95
96	1616·89019	·00062	20198·62740	12·49227	96
97	1746·24141	·00057	21815·51760	12·49284	97
98	1885·94072	·00053	23561·75900	12·49337	98
99	2036·81598	·00049	25447·69972	12·49386	99
100	2199·76126	·00045	27484·51570	12·49432	100

See also **Tables** on pp. **xx–xxxi**

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
I	1·09000	·91743	1·00000	·91743	I
2	1·18810	·84168	2·09000	1·75911	2
3	1·29503	·77218	3·27810	2·53129	3
4	1·41158	·70843	4·57313	3·23972	4
5	1·53862	·64993	5·98471	3·88965	5
6	1·67710	·59627	7·52333	4·48592	6
7	1·82804	·54703	9·20043	5·03295	7
8	1·99256	·50187	11·02847	5·53482	8
9	2·17189	·46043	13·02104	5·99525	9
10	2·36736	·42241	15·19293	6·41766	10
11	2·58043	·38753	17·56029	6·80519	11
12	2·81266	·35553	20·14072	7·16073	12
13	3·06580	·32618	22·95338	7·48690	13
14	3·34173	·29925	26·01919	7·78615	14
15	3·64248	·27454	29·36092	8·06069	15
16	3·97031	·25187	33·00340	8·31256	16
17	4·32763	·23107	36·97370	8·54363	17
18	4·71712	·21199	41·30134	8·75563	18
19	5·14166	·19449	46·01846	8·95011	19
20	5·60441	·17843	51·16012	9·12855	20
21	6·10881	·16370	56·76453	9·29224	21
22	6·65860	·15018	62·87334	9·44243	22
23	7·25787	·13778	69·53914	9·58021	23
24	7·91108	·12640	76·78981	9·70661	24
25	8·62308	·11597	84·70090	9·82258	25
26	9·39916	·10639	93·32398	9·92897	26
27	10·24508	·09761	102·72313	10·02658	27
28	11·16714	·08955	112·96822	10·11613	28
29	12·17218	·08215	124·13536	10·19828	29
30	13·26768	·07537	136·30754	10·27365	30
31	14·46177	·06915	149·57522	10·34280	31
32	15·76333	·06344	164·03699	10·40624	32
33	17·18203	·05820	179·80032	10·46444	33
34	18·72841	·05339	196·98234	10·51784	34
35	20·41397	·04899	215·71075	10·56682	35
36	22·25123	·04494	236·12472	10·61176	36
37	24·25384	·04123	258·37595	10·65299	37
38	26·43668	·03783	282·62978	10·69082	38
39	28·81598	·03470	309·06646	10·72552	39
40	31·40942	·03184	337·88245	10·75736	40
41	34·23627	·02921	369·29187	10·78657	41
42	37·31753	·02680	403·52813	10·81337	42
43	40·67611	·02458	440·84566	10·83795	43
44	44·33696	·02255	481·52177	10·86051	44
45	48·32729	·02069	525·85873	10·88120	45
46	52·67674	·01898	574·18602	10·90018	46
47	57·41765	·01742	626·86276	10·91760	47
48	62·58524	·01598	684·28041	10·93358	48
49	68·21791	·01466	746·86565	10·94823	49
50	74·35752	·01345	815·08356	10·96168	50

9%

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	81·04970	·01234	889·44108	10·97402	51
52	88·34417	·01132	970·49077	10·98534	52
53	96·29514	·01038	1058·83494	10·99573	53
54	104·96171	·00953	1155·13009	11·00525	54
55	114·40826	·00874	1260·09180	11·01399	55
56	124·70501	·00802	1374·50006	11·02201	56
57	135·92846	·00736	1499·20506	11·02937	57
58	148·16202	·00675	1635·13352	11·03612	58
59	161·49660	·00619	1783·29553	11·04231	59
60	176·03129	·00568	1944·79213	11·04799	60
61	191·87411	·00521	2120·82342	11·05320	61
62	209·14278	·00478	2312·69753	11·05798	62
63	227·96563	·00439	2521·84031	11·06237	63
64	248·48253	·00402	2749·80594	11·06640	64
65	270·84596	·00369	2998·28847	11·07009	65
66	295·22210	·00339	3269·13444	11·07347	66
67	321·79209	·00311	3564·35654	11·07658	67
68	350·75338	·00285	3886·14862	11·07943	68
69	382·32118	·00262	4236·90200	11·08205	69
70	416·73009	·00240	4619·22318	11·08445	70
71	454·23579	·00220	5035·95327	11·08665	71
72	495·11702	·00202	5490·18906	11·08867	72
73	539·67755	·00185	5985·30608	11·09052	73
74	588·24853	·00170	6524·98362	11·09222	74
75	641·19089	·00156	7113·23215	11·09378	75
76	698·89807	·00143	7754·42304	11·09521	76
77	761·79890	·00131	8453·32112	11·09653	77
78	830·36080	·00120	9215·12002	11·09773	78
79	905·09327	·00110	10045·48082	11·09883	79
80	986·55167	·00101	10950·57409	11·09985	80
81	1075·34132	·00093	11937·12576	11·10078	81
82	1172·12204	·00085	13012·46708	11·10163	82
83	1277·61302	·00078	14184·58911	11·10241	83
84	1392·59819	·00072	15462·20213	11·10313	84
85	1517·93203	·00066	16854·80033	11·10379	85
86	1654·54591	·00060	18372·73236	11·10440	86
87	1803·45504	·00055	20027·27827	11·10495	87
88	1965·76600	·00051	21830·73331	11·10546	88
89	2142·68494	·00047	23796·49931	11·10593	89
90	2335·52658	·00043	25939·18425	11·10635	90
91	2545·72397	·00039	28274·71083	11·10675	91
92	2774·83913	·00036	30820·43481	11·10711	92
93	3024·57465	·00033	33595·27394	11·10744	93
94	3296·78637	·00030	36619·84859	11·10774	94
95	3593·49715	·00028	39916·63497	11·10802	95
96	3916·91189	·00026	43510·13211	11·10827	96
97	4269·43396	·00023	47427·04400	11·10851	97
98	4653·68302	·00021	51696·47796	11·10872	98
99	5072·51449	·00020	56350·16098	11·10892	99
100	5529·04079	·00018	61422·67547	11·10910	100

See also Tables on pp. xx–xxxi

D 2

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
1	1·10000	·90909	1·00000	·90909	1
2	1·21000	·82645	2·10000	1·73554	2
3	1·33100	·75131	3·31000	2·48685	3
4	1·46410	·68301	4·64100	3·16987	4
5	1·61051	·62092	6·10510	3·79079	5
6	1·77156	·56447	7·71561	4·35526	6
7	1·94872	·51316	9·48717	4·86842	7
8	2·14359	·46651	11·43589	5·33493	8
9	2·35795	·42410	13·57948	5·75902	9
10	2·59374	·38554	15·93742	6·14457	10
11	2·85312	·35049	18·53117	6·49506	11
12	3·13843	·31863	21·38428	6·81369	12
13	3·45227	·28966	24·52271	7·10336	13
14	3·79750	·26333	27·97498	7·36669	14
15	4·17725	·23939	31·77248	7·60608	15
16	4·59497	·21763	35·94973	7·82371	16
17	5·05447	·19784	40·54470	8·02155	17
18	5·55992	·17986	45·59917	8·20141	18
19	6·11591	·16351	51·15909	8·36492	19
20	6·72750	·14864	57·27500	8·51356	20
21	7·40025	·13513	64·00250	8·64869	21
22	8·14027	·12285	71·40275	8·77154	22
23	8·95430	·11168	79·54302	8·88322	23
24	9·84973	·10153	88·49733	8·98474	24
25	10·83471	·09230	98·34706	9·07704	25
26	11·91818	·08391	109·18177	9·16095	26
27	13·10999	·07628	121·09994	9·23722	27
28	14·42099	·06934	134·20994	9·30657	28
29	15·86309	·06304	148·63093	9·36961	29
30	17·44940	·05731	164·49402	9·42691	30
31	19·19434	·05210	181·94342	9·47901	31
32	21·11378	·04736	201·13777	9·52638	32
33	23·22515	·04306	222·25154	9·56943	33
34	25·54767	·03914	245·47670	9·60857	34
35	28·10244	·03558	271·02437	9·64416	35
36	30·91268	·03235	299·12681	9·67651	36
37	34·00395	·02941	330·03949	9·70592	37
38	37·40434	·02673	364·04343	9·73265	38
39	41·14478	·02430	401·44778	9·75696	39
40	45·25926	·02209	442·59256	9·77905	40
41	49·78518	·02009	487·85181	9·79914	41
42	54·76370	·01826	537·63699	9·81740	42
43	60·24007	·01660	592·40069	9·83400	43
44	66·26408	·01509	652·64076	9·84909	44
45	72·89048	·01372	718·90484	9·86281	45
46	80·17953	·01247	791·79532	9·87528	46
47	88·19749	·01134	871·97485	9·88662	47
48	97·01723	·01031	960·17234	9·89693	48
49	106·71896	·00937	1057·18957	9·90630	49
50	117·39085	·00852	1163·90853	9·91481	50

For explanation see pp. 8–13

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
51	129·12994	·00774	1281·29938	9·92256	51
52	142·04293	·00704	1410·42932	9·92960	52
53	156·24723	·00640	1552·47225	9·93600	53
54	171·87195	·00582	1708·71948	9·94182	54
55	189·05914	·00529	1880·59142	9·94711	55
56	207·96506	·00481	2069·65057	9·95191	56
57	228·76156	·00437	2277·61562	9·95629	57
58	251·63772	·00397	2506·37719	9·96026	58
59	276·80149	·00361	2758·01490	9·96387	59
60	304·48164	·00328	3034·81640	9·96716	60
61	334·92980	·00299	3339·29803	9·97014	61
62	368·42278	·00271	3674·22784	9·97286	62
63	405·26506	·00247	4042·65062	9·97532	63
64	445·79157	·00224	4447·91568	9·97757	64
65	490·37073	·00204	4893·70725	9·97961	65
66	539·40780	·00185	5384·07798	9·98146	66
67	593·34858	·00169	5923·48578	9·98315	67
68	652·68344	·00153	6516·83435	9·98468	68
69	717·95178	·00139	7169·51779	9·98607	69
70	789·74696	·00127	7887·46957	9·98734	70
71	868·72165	·00115	8677·21652	9·98849	71
72	955·59382	·00105	9545·93818	9·98954	72
73	1051·15320	·00095	10501·53199	9·99049	73
74	1156·26852	·00086	11552·68519	9·99135	74
75	1271·89537	·00079	12708·95371	9·99214	75
76	1399·08491	·00071	13980·84909	9·99285	76
77	1538·99340	·00065	15379·93399	9·99350	77
78	1692·89274	·00059	16918·92739	9·99409	78
79	1862·18201	·00054	18611·82013	9·99463	79
80	2048·40021	·00049	20474·00215	9·99512	80
81	2253·24024	·00044	22522·40236	9·99556	81
82	2478·56426	·00040	24775·64260	9·99597	82
83	2726·42069	·00037	27254·20686	9·99633	83
84	2999·06275	·00033	29980·62754	9·99667	84
85	3298·96903	·00030	32979·69030	9·99697	85
86	3628·86593	·00028	36278·65932	9·99724	86
87	3991·75253	·00025	39907·52526	9·99749	87
88	4390·92778	·00023	43899·27778	9·99772	88
89	4830·02056	·00021	48290·20556	9·99793	89
90	5313·02261	·00019	53120·22612	9·99812	90
91	5844·32487	·00017	58433·24873	9·99829	91
92	6428·75736	·00016	64277·57360	9·99844	92
93	7071·63310	·00014	70706·33096	9·99859	93
94	7778·79641	·00013	77777·96406	9·99871	94
95	8556·67605	·00012	85556·76046	9·99883	95
96	9412·34365	·00011	94113·43651	9·99894	96
97	10353·57802	·00010	103525·78016	9·99903	97
98	11388·93582	·00009	113879·35818	9·99912	98
99	12527·82940	·00008	125268·29400	9·99920	99
100	13780·61234	·00007	137796·12340	9·99927	100

		AMOUNT OF ONE POUND AT END OF YEAR			
Years	1 %	$1\frac{1}{4}$ %	$1\frac{1}{2}$ %	$1\frac{3}{4}$ %	Years
10	1·10462	1·13227	1·16054	1·18944	10
20	1·22019	1·28204	1·34686	1·41478	20
30	1·34785	1·45161	1·56308	1·68280	30
40	1·48886	1·64362	1·81402	2·00160	40
50	1·64463	1·86102	2·10524	2·38079	50
60	1·81670	2·10718	2·44322	2·83182	60
70	2·00676	2·38590	2·83546	3·36829	70
80	2·21672	2·70149	3·29066	4·00639	80
90	2·44863	3·05881	3·81895	4·76538	90
100	2·70481	3·46340	4·43205	5·66816	100
	2 %	$2\frac{1}{4}$ %	$2\frac{1}{2}$ %	$2\frac{3}{4}$ %	
10	1·21899	1·24920	1·28008	1·31165	10
20	1·48595	1·56051	1·63862	1·72043	20
30	1·81136	1·94939	2·09757	2·25660	30
40	2·20803	2·43519	2·68506	2·95987	40
50	2·69159	3·04205	3·43711	3·88232	50
60	3·28103	3·80013	4·39979	5·09225	60
70	3·99956	4·74714	5·63210	6·67926	70
80	4·87544	5·93015	7·20957	8·76085	80
90	5·94313	7·40796	9·22886	11·49118	90
100	7·24465	9·25405	11·81372	15·07242	100
	3 %	$3\frac{1}{4}$ %	$3\frac{1}{2}$ %	$3\frac{3}{4}$ %	
10	1·34392	1·37689	1·41060	1·44504	10
20	1·80611	1·89584	1·98979	2·08815	20
30	2·42726	2·61037	2·80679	3·01747	30
40	3·26204	3·59420	3·95926	4·36038	40
50	4·38391	4·94884	5·58493	6·30094	50
60	5·89160	6·81402	7·87809	9·10513	60
70	7·91782	9·38219	11·11282	13·15732	70
80	10·64089	12·91828	15·67574	19·01290	80
90	14·30047	17·78711	22·11217	27·47448	90
100	19·21863	24·49097	31·19141	39·70183	100

For explanation see pp. 8–13

AMOUNT OF ONE POUND AT END OF YEAR

Years	4 %	4¼ %	4½ %	4¾ %	Years
10	1·48024	1·51621	1·55297	1·59052	10
20	2·19112	2·29891	2·41171	2·52977	20
30	3·24340	3·48564	3·74532	4·02366	30
40	4·80102	5·28497	5·81636	6·39972	40
50	7·10668	8·01315	9·03264	10·17892	50
60	10·51963	12·14965	14·02741	16·18982	60
70	15·57162	18·42148	21·78413	25·75030	70
80	23·04980	27·93091	33·83009	40·95647	80
90	34·11933	42·34925	52·53710	65·14226	90
100	50·50495	64·21055	81·58852	103·61036	100

	5 %	5½ %	6 %	6½ %	
10	1·62889	1·70814	1·79085	1·87714	10
20	2·65330	2·91776	3·20714	3·52365	20
30	4·32194	4·98395	5·74349	6·61437	30
40	7·03999	8·51331	10·28572	12·41607	40
50	11·46740	14·54196	18·42015	23·30668	50
60	18·67919	24·83977	32·98769	43·74984	60
70	30·42643	42·42992	59·07593	82·12446	70
80	49·56144	72·47643	105·79599	154·15891	80
90	80·73037	123·80021	189·46451	289·37746	90
100	131·50126	211·46864	339·30208	543·20127	100

	7 %	8 %	9 %	10 %	
10	1·96715	2·15892	2·36736	2·59374	10
20	3·86968	4·66096	5·60441	6·72750	20
30	7·61226	10·06266	13·26768	17·44940	30
40	14·97446	21·72452	31·40942	45·25926	40
50	29·45703	46·90161	74·35752	117·39085	50
60	57·94644	101·25706	176·03129	304·48164	60
70	113·98938	218·60641	416·73009	789·74696	70
80	224·23437	471·95483	986·55167	2048·40021	80
90	441·10293	1018·91509	2335·52658	5313·02261	90
100	867·71623	2199·76126	5529·04079	13780·61234	100

INTEREST TABLES

THE PRESENT VALUE OF ONE POUND DUE AT END OF YEAR

Years	1 %	1¼ %	1½ %	1¾ %	Years
10	·90529	·88318	·86167	·84073	10
20	·81954	·78001	·74247	·70682	20
30	·74192	·68889	·63976	·59425	30
40	·67165	·60841	·55126	·49960	40
50	·60804	·53734	·47500	·42003	50
60	·55045	·47457	·40930	·35313	60
70	·49831	·41913	·35268	·29689	70
80	·45112	·37017	·30389	·24960	80
90	·40839	·32692	·26185	·20985	90
100	·36971	·28873	·22563	·17642	100

	2 %	2¼ %	2½ %	2¾ %	
10	·82035	·80051	·78120	·76240	10
20	·67297	·64082	·61027	·58125	20
30	·55207	·51298	·47674	·44314	30
40	·45289	·41065	·37243	·33785	40
50	·37153	·32873	·29094	·25758	50
60	·30478	·26315	·22728	·19638	60
70	·25003	·21065	·17755	·14972	70
80	·20511	·16863	·13870	·11414	80
90	·16826	·13499	·10836	·08702	90
100	·13803	·10806	·08465	·06635	100

	3 %	3¼ %	3½ %	3¾ %	
10	·74409	·72627	·70892	·69202	10
20	·55368	·52747	·50257	·47889	20
30	·41199	·38309	·35628	·33140	30
40	·30656	·27823	·25257	·22934	40
50	·22811	·20207	·17905	·15871	50
60	·16973	·14676	·12693	·10983	60
70	·12630	·10658	·08999	·07600	70
80	·09398	·07741	·06379	·05260	80
90	·06993	·05622	·04522	·03640	90
100	·05203	·04083	·03206	·02519	100

For explanation see pp. 8-13

	THE PRESENT VALUE OF ONE POUND DUE AT END OF YEAR				
Years	**4 %**	**4¼ %**	**4½ %**	**4¾ %**	Years
10	·67556	·65954	·64393	·62872	10
20	·45639	·43499	·41464	·39529	20
30	·30832	·28689	·26700	·24853	30
40	·20829	·18922	·17193	·15626	40
50	·14071	·12479	·11071	·09824	50
60	·09506	·08231	·07129	·06177	60
70	·06422	·05428	·04590	·03883	70
80	·04338	·03580	·02956	·02442	80
90	·02931	·02361	·01903	·01535	90
100	·01980	·01557	·01226	·00965	100
	5 %	**5½ %**	**6 %**	**6½ %**	
10	·61391	·58543	·55839	·53273	10
20	·37689	·34273	·31180	·28380	20
30	·23138	·20064	·17411	·15119	30
40	·14205	·11746	·09722	·08054	40
50	·08720	·06877	·05429	·04291	50
60	·05354	·04026	·03031	·02286	60
70	·03287	·02357	·01693	·01218	70
80	·02018	·01380	·00945	·00649	80
90	·01239	·00808	·00528	·00346	90
100	·00760	·00473	·00295	·00184	100
	7 %	**8 %**	**9 %**	**10 %**	
10	·50835	·46319	·42241	·38554	10
20	·25842	·21455	·17843	·14864	20
30	·13137	·09938	·07537	·05731	30
40	·06678	·04603	·03184	·02209	40
50	·03395	·02132	·01345	·00852	50
60	·01726	·00988	·00568	·00328	60
70	·00877	·00457	·00240	·00127	70
80	·00446	·00212	·00101	·00049	80
90	·00227	·00098	·00043	·00019	90
100	·00115	·00045	·00018	·00007	100

For 15% see p. xl

THE AMOUNT OF ONE POUND PER ANNUM

Years	1 %	1¼ %	1½ %	1¾ %	Years
10	10·46221	10·58167	10·70272	10·82540	10
20	22·01900	22·56298	23·12367	23·70161	20
30	34·78489	36·12907	37·53868	39·01715	30
40	48·88637	51·48956	54·26789	57·23413	40
50	64·46318	68·88179	73·68283	78·90222	50
60	81·66967	88·57451	96·21465	104·67522	60
70	100·67634	110·87200	122·36375	135·33076	70
80	121·67152	136·11880	152·71085	171·79382	80
90	144·86327	164·70501	187·92990	215·16462	90
100	170·48138	197·07234	228·80304	266·75177	100

	2 %	2¼ %	2½ %	2¾ %	
10	10·94972	11·07571	11·20338	11·33276	10
20	24·29737	24·91152	25·54466	26·19740	20
30	40·56808	42·19526	43·90270	45·69461	30
40	60·40198	63·78618	67·40256	71·26815	40
50	84·57940	90·75762	97·48435	104·81170	50
60	114·05154	124·45043	135·99159	148·80914	60
70	149·97791	166·53962	185·28411	206·51843	70
80	193·77195	219·11757	248·38271	282·21287	80
90	247·15665	284·79813	329·15425	381·49757	90
100	312·23230	366·84650	432·54865	511·72445	100

	3 %	3¼ %	3½ %	3¾ %	
10	11·46388	11·59675	11·73139	11·86784	10
20	26·87037	27·56424	28·27968	29·01739	20
30	47·57542	49·54980	51·62267	53·79924	30
40	75·40126	79·82158	84·55028	89·61010	40
50	112·79687	121·50263	130·99791	141·35837	50
60	163·05344	178·89303	196·51688	216·13690	60
70	230·59406	257·91354	288·93786	324·19515	70
80	321·36302·	366·71643	419·30678	480·34408	80
90	443·34890	516·52651	603·20503	705·98614	90
100	607·28773	722·79916	862·61166	1032·04883	100

For explanation see pp. 8–13

THE AMOUNT OF ONE POUND PER ANNUM

Years	4 %	4¼ %	4½ %	4¾ %	Years
10	12·00611	12·14622	12·28821	12·43209	10
20	29·77808	30·56250	31·37142	32·20563	20
30	56·08494	58·48553	61·00707	63·65594	30
40	95·02552	100·82283	107·03032	113·67841	40
50	152·66708	165·01525	178·50303	193·24036	50
60	237·99069	262·34474	289·49795	319·78559	60
70	364·29046	409·91711	461·86968	521·05885	70
80	551·24498	633·66848	729·55770	841·18887	80
90	827·98333	972·92354	1145·26900	1350·36345	90
100	1237·62370	1487·30697	1790·85595	2160·21801	100

Years	5 %	5½ %	6 %	6½ %	
10	12·57789	12·87535	13·18079	13·49442	10
20	33·06595	34·86832	36·78559	38·82531	20
30	66·43885	72·43548	79·05819	86·37486	30
40	120·79977	136·60561	154·76197	175·63192	40
50	209·34800	246·21748	290·33590	343·17967	50
60	353·58372	433·45037	533·12818	657·68984	60
70	588·52851	753·27120	967·93217	1248·06867	70
80	971·22882	1299·57139	1746·59989	2356·29087	80
90	1594·60730	2232·73101	3141·07519	4436·57630	90
100	2610·02516	3826·70246	5638·36806	8341·55802	100

Years	7 %	8 %	9 %	10 %	
10	13·81645	14·48656	15·19293	15·93742	10
20	40·99549	45·76196	51·16012	57·27500	20
30	94·46079	113·28321	136·30754	164·49402	30
40	199·63511	259·05652	337·88245	442·59256	40
50	406·52893	573·77016	815·08356	1163·90853	50
60	813·52038	1253·21330	1944·79213	3034·81640	60
70	1614·13417	2720·08007	4619·22318	7887·46957	70
80	3189·06268	5886·93543	10950·57409	20474·00215	80
90	6287·18543	12723·93862	25939·18425	53120·22612	90
100	12381·66179	27484·51570	61422·67547	137796·12340	100

THE PRESENT VALUE OF ONE POUND PER ANNUM DUE AT END OF YEAR

Years	1 %	1¼ %	1½ %	1¾ %	Years
10	9·47130	9·34553	9·22219	9·10122	10
20	18·04555	17·59932	17·16864	16·75288	20
30	25·80771	24·88891	24·01584	23·18585	30
40	32·83469	31·32693	29·91585	28·59423	40
50	39·19612	37·01288	34·99969	33·14121	50
60	44·95504	42·03459	39·38027	36·96399	60
70	50·16851	46·46968	43·15487	40·17790	70
80	54·88821	50·38666	46·40732	42·87994	80
90	59·16088	53·84606	49·20985	45·15161	90
100	63·02888	56·90134	51·62470	47·06147	100
	2 %	2¼ %	2½ %	2¾ %	
10	8·98258	8·86622	8·75206	8·64008	10
20	16·35143	15·96371	15·58916	15·22725	20
30	22·39646	21·64533	20·93029	20·24930	30
40	27·35548	26·19352	25·10277	24·07810	40
50	31·42361	29·83440	28·36231	26·99717	50
60	34·76089	32·74895	30·90866	29·22266	60
70	37·49862	35·08208	32·89786	30·91937	70
80	39·74451	36·94978	34·45182	32·21294	80
90	41·58693	38·44489	35·66577	33·19915	90
100	43·09835	39·64174	36·61410	33·95104	100
	3 %	3¼ %	3½ %	3¾ %	
10	8·53020	8·42240	8·31661	8·21279	10
20	14·87748	14·53935	14·21240	13·89620	20
30	19·60044	18·98192	18·39205	17·82925	30
40	23·11477	22·20843	21·35507	20·55099	40
50	25·72976	24·55176	23·45562	22·43449	50
60	27·67556	26·25366	24·94474	23·73792	60
70	29·12342	27·48970	26·00040	24·63991	70
80	30·20076	28·38740	26·74878	25·26411	80
90	31·00241	29·03937	27·27932	25·69607	90
100	31·59891	29·51288	27·65543	25·99499	100

For explanation see pp. 8–13

THE PRESENT VALUE OF ONE POUND PER ANNUM DUE AT END OF YEAR

Years	4 %	4¼ %	4½ %	4¾ %	Years
10	8·11090	8·01089	7·91272	7·81635	10
20	13·59033	13·29437	13·00794	12·73067	20
30	17·29203	16·77902	16·28889	15·82042	30
40	19·79277	19·07727	18·40158	17·76302	40
50	21·48219	20·59306	19·76201	18·98437	50
60	22·62349	21·59278	20·63802	19·75227	60
70	23·39452	22·25213	21·20211	20·23506	70
80	23·91539	22·68700	21·56534	20·53861	80
90	24·26728	22·97381	21·79924	20·72945	90
100	24·50500	23·16297	21·94985	20·84944	100
	5 %	5½ %	6 %	6½ %	
10	7·72173	7·53763	7·36009	7·18883	10
20	12·46221	11·95038	11·46992	11·01851	20
30	15·37245	14·53375	13·76483	13·05868	30
40	17·15909	16·04612	15·04630	14·14553	40
50	18·25592	16·93152	15·76186	14·72452	50
60	18·92929	17·44985	16·16143	15·03297	60
70	19·34268	17·75330	16·38454	15·19728	70
80	19·59646	17·93095	16·50913	15·28482	80
90	19·75226	18·03495	16·57870	15·33145	90
100	19·84791	18·09584	16·61755	15·35629	100
	7 %	8 %	9 %	10 %	
10	7·02358	6·71008	6·41766	6·14457	10
20	10·59401	9·81815	9·12855	8·51356	20
30	12·40904	11·25778	10·27365	9·42691	30
40	13·33171	11·92461	10·75736	9·77905	40
50	13·80075	12·23348	10·96168	9·91481	50
60	14·03918	12·37655	11·04799	9·96716	60
70	14·16039	12·44282	11·08445	9·98734	70
80	14·22201	12·47351	11·09985	9·99512	80
90	14·25333	12·48773	11·10635	9·99812	90
100	14·26925	12·49432	11·10910	9·99927	100

THE PRESENT VALUE OF A PERPETUITY OF £1 PER ANNUM

At per Cent.	£	s.	d.	£	At per Cent.	£	s.	d.	£
⅛ or	0	2	6	800·00000	5⅛ or	5	2	6	19·51220
¼ ,,	0	5	0	400·00000	5¼ ,,	5	5	0	19·04762
⅜ ,,	0	7	6	266·66667	5⅜ ,,	5	7	6	18·60465
½ ,,	0	10	0	200·00000	5½ ,,	5	10	0	18·18182
⅝ ,,	0	12	6	160·00000	5⅝ ,,	5	12	6	17·77778
¾ ,,	0	15	0	133·33333	5¾ ,,	5	15	0	17·39130
⅞ ,,	0	17	6	114·28571	5⅞ ,,	5	17	6	17·02128
1 ,,	1	0	0	100·00000	6 ,,	6	0	0	16·66667
1⅛ ,,	1	2	6	88·88889	6⅛ ,,	6	2	6	16·32653
1¼ ,,	1	5	0	80·00000	6¼ ,,	6	5	0	16·00000
1⅜ ,,	1	7	6	72·72727	6⅜ ,,	6	7	6	15·68627
1½ ,,	1	10	0	66·66667	6½ ,,	6	10	0	15·38462
1⅝ ,,	1	12	6	61·53846	6⅝ ,,	6	12	6	15·09434
1¾ ,,	1	15	0	57·14286	6¾ ,,	6	15	0	14·81481
1⅞ ,,	1	17	6	53·33333	6⅞ ,,	6	17	6	14·54545
2 ,,	2	0	0	50·00000	7 ,,	7	0	0	14·28571
2⅛ ,,	2	2	6	47·05882	7⅛ ,,	7	2	6	14·03509
2¼ ,,	2	5	0	44·44444	7¼ ,,	7	5	0	13·79310
2⅜ ,,	2	7	6	42·10526	7⅜ ,,	7	7	6	13·55932
2½ ,,	2	10	0	40·00000	7½ ,,	7	10	0	13·33333
2⅝ ,,	2	12	6	38·09524	7⅝ ,,	7	12	6	13·11475
2¾ ,,	2	15	0	36·36364	7¾ ,,	7	15	0	12·90323
2⅞ ,,	2	17	6	34·78261	7⅞ ,,	7	17	6	12·69841
3 ,,	3	0	0	33·33333	8 ,,	8	0	0	12·50000
3⅛ ,,	3	2	6	32·00000	8⅛ ,,	8	2	6	12·30769
3¼ ,,	3	5	0	30·76923	8¼ ,,	8	5	0	12·12121
3⅜ ,,	3	7	6	29·62963	8⅜ ,,	8	7	6	11·94030
3½ ,,	3	10	0	28·57143	8½ ,,	8	10	0	11·76471
3⅝ ,,	3	12	6	27·58621	8⅝ ,,	8	12	6	11·59420
3¾ ,,	3	15	0	26·66667	8¾ ,,	8	15	0	11·42857
3⅞ ,,	3	17	6	25·80645	8⅞ ,,	8	17	6	11·26761
4 ,,	4	0	0	25·00000	9 ,,	9	0	0	11·11111
4⅛ ,,	4	2	6	24·24242	9⅛ ,,	9	2	6	10·95890
4¼ ,,	4	5	0	23·52941	9¼ ,,	9	5	0	10·81081
4⅜ ,,	4	7	6	22·85714	9⅜ ,,	9	7	6	10·66667
4½ ,,	4	10	0	22·22222	9½ ,,	9	10	0	10·52632
4⅝ ,,	4	12	6	21·62162	9⅝ ,,	9	12	6	10·38961
4¾ ,,	4	15	0	21·05263	9¾ ,,	9	15	0	10·25641
4⅞ ,,	4	17	6	20·51282	9⅞ ,,	9	17	6	10·12658
5 ,,	5	0	0	20·00000	10 ,,	10	0	0	10·00000

For explanation see p. 13

Years Deferred	1 %	1¼ %	1½ %	1¾ %	Years Deferred
		THE PRESENT VALUE OF THE REVERSION OF A PERPETUITY OF £1			
I	99·00990	79·01235	65·68145	56·16006	I
2	98·02960	78·03688	64·71079	55·19416	2
3	97·05901	77·07347	63·75447	54·24488	3
4	96·09893	76·12194	62·81229	53·31192	4
5	95·14657	75·18217	61·88402	52·39500	5
6	94·20452	74·25399	60·96948	51·49386	6
7	93·27181	73·33727	60·06846	50·60822	7
8	92·34832	72·43188	59·18074	49·73781	8
9	91·43398	71·53766	58·30615	48·88237	9
10	90·52870	70·65447	57·44448	48·04164	10
11	89·63237	69·78220	56·59555	47·21537	11
12	88·74492	68·92069	55·75916	46·40331	12
13	87·86626	68·06982	54·93514	45·60522	13
14	86·99630	67·22945	54·12329	44·82085	14
15	86·13495	66·39945	53·32344	44·04998	15
16	85·28213	65·57971	52·53541	43·29236	16
17	84·43775	64·77008	51·75902	42·54778	17
18	83·60173	63·97045	50·99411	41·81600	18
19	82·77399	63·18069	50·24050	41·09680	19
20	81·95445	62·40068	49·49803	40·38998	20
21	81·14302	61·63031	48·76653	39·69531	21
22	80·33962	60·86944	48·04584	39·01259	22
23	79·54418	60·11796	47·33581	38·34161	23
24	78·75661	59·37577	46·63626	37·68217	24
25	77·97684	58·64273	45·94706	37·03408	25
26	77·20480	57·91875	45·26804	36·39713	26
27	76·44039	57·20370	44·59905	35·77113	27
28	75·68356	56·49748	43·93995	35·15591	28
29	74·93421	55·79998	43·29059	34·55126	29
30	74·19229	55·11109	42·65083	33·95701	30
31	73·45771	54·43071	42·02052	33·37298	31
32	72·73041	53·75873	41·39953	32·79900	32
33	72·01031	53·09504	40·78771	32·23489	33
34	71·29733	52·43954	40·18494	31·68048	34
35	70·59142	51·79214	39·59107	31·13561	35
36	69·89250	51·15273	39·00599	30·60011	36
37	69·20049	50·52122	38·42954	30·07382	37
38	68·51534	49·89750	37·86162	29·55658	38
39	67·83697	49·28148	37·30209	29·04823	39
40	67·16531	48·67307	36·75082	28·54863	40
41	66·50031	48·07216	36·20771	28·05762	41
42	65·84189	47·47868	35·67262	27·57506	42
43	65·18999	46·89252	35·14544	27·10079	43
44	64·54455	46·31360	34·62605	26·63469	44
45	63·90549	45·74183	34·11433	26·17660	45
46	63·27276	45·17712	33·61018	25·72639	46
47	62·64630	44·61938	33·11348	25·28392	47
48	62·02604	44·06852	32·62412	24·84906	48
49	61·41192	43·52446	32·14199	24·42168	49
50	60·80388	42·98712	31·66698	24·00165	50

THE PRESENT VALUE OF THE REVERSION OF A PERPETUITY OF £1

Years Deferred	2 %	2¼ %	2½ %	2¾ %	Years Deferred
1	49·01961	43·46644	39·02439	35·39040	1
2	48·05844	42·50997	38·07258	34·44322	2
3	47·11612	41·57454	37·14398	33·52138	3
4	46·19227	40·65970	36·23803	32·62421	4
5	45·28654	39·76499	35·35417	31·75106	5
6	44·39857	38·88996	34·49188	30·90127	6
7	43·52801	38·03419	33·65061	30·07423	7
8	42·67452	37·19726	32·82986	29·26933	8
9	41·83776	36·37873	32·02913	28·48596	9
10	41·01742	35·57822	31·24794	27·72356	10
11	40·21315	34·79533	30·48579	26·98157	11
12	39·42466	34·02966	29·74224	26·25944	12
13	38·65163	33·28084	29·01682	25·55663	13
14	37·89375	32·54850	28·30909	24·87263	14
15	37·15074	31·83227	27·61862	24·20694	15
16	36·42229	31·13181	26·94500	23·55907	16
17	35·70813	30·44676	26·28780	22·92853	17
18	35·00797	29·77678	25·64664	22·31487	18
19	34·32154	29·12154	25·02111	21·71764	19
20	33·64857	28·48073	24·41084	21·13639	20
21	32·98879	27·85401	23·81545	20·57069	21
22	32·34195	27·24109	23·23459	20·02014	22
23	31·70780	26·64165	22·66789	19·48432	23
24	31·08607	26·05540	22·11501	18·96284	24
25	30·47654	25·48206	21·57562	18·45532	25
26	29·87896	24·92133	21·04939	17·96138	26
27	29·29310	24·37294	20·53599	17·48067	27
28	28·71873	23·83661	20·03511	17·01281	28
29	28·15562	23·31209	19·54645	16·55748	29
30	27·60354	22·79911	19·06971	16·11434	30
31	27·06230	22·29742	18·60460	15·68305	31
32	26·53167	21·80677	18·15082	15·26331	32
33	26·01144	21·32691	17·70812	14·85481	33
34	25·50141	20·85761	17·27621	14·45723	34
35	25·00138	20·39864	16·85484	14·07030	35
36	24·51116	19·94977	16·44375	13·69372	36
37	24·03055	19·51078	16·04268	13·32722	37
38	23·55936	19·08145	15·65140	12·97053	38
39	23·09741	18·66156	15·26966	12·62339	39
40	22·64452	18·25092	14·89723	12·28554	40
41	22·20051	17·84931	14·53388	11·95673	41
42	21·76521	17·45654	14·17939	11·63672	42
43	21·33844	17·07241	13·83355	11·32527	43
44	20·92004	16·69673	13·49615	11·02217	44
45	20·50984	16·32932	13·16698	10·72717	45
46	20·10769	15·97000	12·84583	10·44007	46
47	19·71342	15·61858	12·53252	10·16065	47
48	19·32688	15·27489	12·22685	9·88871	48
49	18·94792	14·93877	11·92863	9·62405	49
50	18·57639	14·61004	11·63769	9·36647	50

For explanation see pp. 13, 14

THE PRESENT VALUE OF THE REVERSION OF A PERPETUITY OF £1

Years Deferred	3 %	3¼ %	3½ %	3¾ %	Years Deferred
1	32·36246	29·80071	27·60525	25·70281	1
2	31·41986	28·86267	26·67174	24·77380	2
3	30·50472	27·95416	25·76979	23·87836	3
4	29·61623	27·07425	24·89835	23·01529	4
5	28·75362	26·22203	24·05638	22·18341	5
6	27·91614	25·39664	23·24288	21·38160	6
7	27·10305	24·59723	22·45689	20·60877	7
8	26·31364	23·82298	21·69747	19·86387	8
9	25·54722	23·07311	20·96374	19·14590	9
10	24·80313	22·34683	20·25482	18·45388	10
11	24·08071	21·64342	19·56988	17·78687	11
12	23·37933	20·96215	18·90810	17·14398	12
13	22·69737	20·30233	18·26869	16·52431	13
14	22·03726	19·66327	17·65091	15·92705	14
15	21·39539	19·04433	17·05402	15·35137	15
16	20·77223	18·44487	16·47731	14·79650	16
17	20·16721	17·86428	15·92011	14·26169	17
18	19·57982	17·30197	15·38175	13·74621	18
19	19·00953	16·75735	14·86159	13·24936	19
20	18·45585	16·22988	14·35903	12·77047	20
21	17·91831	15·71902	13·87346	12·30888	21
22	17·39641	15·22423	13·40430	11·86398	22
23	16·88972	14·74501	12·95102	11·43516	23
24	16·39779	14·28089	12·51306	11·02185	24
25	15·92018	13·83137	12·08991	10·62347	25
26	15·45649	13·39600	11·68108	10·23948	26
27	15·00630	12·97433	11·28606	9·86938	27
28	14·56922	12·56594	10·90441	9·51266	28
29	14·14487	12·17040	10·53566	9·16883	29
30	13·73289	11·78731	10·17938	8·83742	30
31	13·33290	11·41628	9·83515	8·51800	31
32	12·94456	11·05693	9·50256	8·21012	32
33	12·56754	10·70889	9·18122	7·91337	33
34	12·20149	10·37181	8·87075	7·62734	34
35	11·84611	10·04534	8·57077	7·35166	35
36	11·50108	9·72914	8·28094	7·08593	36
37	11·16609	9·42289	8·00090	6·82982	37
38	10·84087	9·12629	7·73034	6·58296	38
39	10·52511	8·83902	7·46893	6·34502	39
40	10·21856	8·56080	7·21636	6·11568	40
41	9·92093	8·29133	6·97233	5·89463	41
42	9·63197	8·03034	6·73655	5·68157	42
43	9·35143	7·77757	6·50874	5·47621	43
44	9·07906	7·53276	6·28864	5·27828	44
45	8·81462	7·29565	6·07598	5·08750	45
46	8·55788	7·06600	5·87051	4·90361	46
47	8·30862	6·84359	5·67199	4·72637	47
48	8·06662	6·62817	5·48018	4·55554	48
49	7·83167	6·41954	5·29486	4·39088	49
50	7·60357	6·21747	5·11581	4·23218	50

E

THE PRESENT VALUE OF THE REVERSION OF A PERPETUITY OF £1

Years Deferred	4 %	4½ %	5 %	6 %	Years Deferred
1	24·03846	21·26528	19·04762	15·72327	1
2	23·11391	20·34955	18·14059	14·83328	2
3	22·22491	19·47326	17·27675	13·99366	3
4	21·37010	18·63469	16·45405	13·20156	4
5	20·54818	17·83224	15·67052	12·45431	5
6	19·75786	17·06435	14·92431	11·74935	6
7	18·99795	16·32952	14·21363	11·08429	7
8	18·26725	15·62633	13·53679	10·45688	8
9	17·56467	14·95343	12·89218	9·86498	9
10	16·88910	14·30950	12·27827	9·30658	10
11	16·23952	13·69330	11·69359	8·77980	11
12	15·61493	13·10364	11·13675	8·28283	12
13	15·01435	12·53937	10·60643	7·81399	13
14	14·43688	11·99939	10·10136	7·37169	14
15	13·88161	11·48267	9·62034	6·95442	15
16	13·34770	10·98821	9·16223	6·56077	16
17	12·83433	10·51503	8·72593	6·18941	17
18	12·34070	10·06223	8·31041	5·83907	18
19	11·86606	9·62893	7·91468	5·50855	19
20	11·40967	9·21428	7·53779	5·19675	20
21	10·97084	8·81750	7·17885	4·90259	21
22	10·54888	8·43780	6·83700	4·62509	22
23	10·14316	8·07445	6·51143	4·36329	23
24	9·75304	7·72674	6·20136	4·11631	24
25	9·37792	7·39401	5·90606	3·88331	25
26	9·01723	7·07561	5·62482	3·66350	26
27	8·67041	6·77092	5·35697	3·45614	27
28	8·33694	6·47935	5·10187	3·26051	28
29	8·01628	6·20033	4·85893	3·07595	29
30	7·70797	5·93333	4·62755	2·90184	30
31	7·41151	5·67783	4·40719	2·73758	31
32	7·12645	5·43333	4·19732	2·58263	32
33	6·85235	5·19936	3·99745	2·43644	33
34	6·58880	4·97546	3·80710	2·29853	34
35	6·33539	4·76121	3·62581	2·16842	35
36	6·09172	4·55618	3·45315	2·04567	36
37	5·85742	4·35998	3·28871	1·92989	37
38	5·63213	4·17223	3·13211	1·82067	38
39	5·41551	3·99256	2·98296	1·71760	39
40	5·20723	3·82064	2·84091	1·62037	40
41	5·00695	3·65611	2·70563	1·52865	41
42	4·81437	3·49867	2·57679	1·44213	42
43	4·62920	3·34801	2·45409	1·36050	43
44	4·45116	3·20384	2·33723	1·28349	44
45	4·27996	3·06587	2·22593	1·21084	45
46	4·11535	2·93385	2·11993	1·14230	46
47	3·95706	2·80751	2·01899	1·07764	47
48	3·80487	2·68661	1·92284	1·01664	48
49	3·65853	2·57092	1·83128	·95910	49
50	3·51781	2·46021	1·74408	·90481	50

For explanation see pp. 13, 14.   See also Tables on pp. xxxii–xxxix

The Present Value of the Perpetuity of One Year's Rent or Fine, Payable for Renewing Estates at Various Intervals and Rates of Interest

Years	3 %	4 %	5 %	6 %	8 %	10 %	Years
			YEARS' PURCHASE				
2	16·4204	12·2549	9·7561	8·0906	6·0096	4·7619	2
3	10·7839	8·0089	6·3439	5·2350	3·8504	3·0211	3
4	7·9675	5·8872	4·6401	3·8098	2·7740	2·1547	4
5	6·2786	4·6157	3·6195	2·9566	2·1307	1·6380	5
6	5·1533	3·7690	2·9403	2·3894	1·7039	1·2961	6
7	4·3503	3·1652	2·4564	1·9856	1·4009	1·0541	7
10	2·9076	2·0823	1·5901	1·2646	·8629	·6275	10
14	1·9509	1·3667	1·0205	·7931	·5162	·3575	14
20	1·2405	·8395	·6049	·4531	·2731	·1746	20
21	1·1624	·7820	·5599	·4167	·2479	·1562	21
40	·4421	·2631	·1656	·1077	·0483	·0226	40

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

TEN YEARS' LEASE

Years	2 %	2½ %	3 %	3½ %	Years
1	·82034	·78119	·74409	·70892	1
2	1·65710	1·58192	1·51051	1·44265	2
3	2·51059	2·40267	2·29992	2·20207	3
4	3·38115	3·24394	3·11301	2·98806	4
5	4·26912	4·10623	3·95049	3·80156	5
6	5·17485	4·99009	4·81310	4·64353	6
7	6·09870	5·89604	5·70159	5·51497	7
8	7·04102	6·82464	6·61673	6·41692	8
9	8·00219	7·77645	7·55933	7·35043	9
10	8·98258	8·75206	8·53020	8·31661	10

Years	4 %	4½ %	5 %	17·95 %	Years
1	·67557	·64393	·61391	·1919	1
2	1·37815	1·31683	1·25852	·4182	2
3	2·10885	2·02002	1·93536	·6851	3
4	2·86876	2·75485	2·64604	1·0000	4
5	3·65908	3·52274	3·39225	1·3714	5
6	4·48100	4·32519	4·17578	1·8094	6
7	5·33581	5·16376	4·99848	2·3261	7
8	6·22481	6·04005	5·86232	2·9355	8
9	7·14936	6·95578	6·76935	3·6543	9
10	8·11090	7·91272	7·72173	4·5021	10

For explanation see pp. 14–16

E 2

Years	**2** %	**2½** %	**3** %	**3½** %	Years
	Number of Years' Purchase for the Renewal of any Number of Years Expired in a **TWENTY YEARS' LEASE**				
1	·67297	·61027	·55368	·50256	1
2	1·35940	1·23580	1·12397	1·02272	2
3	2·05956	1·87696	1·71136	1·56108	3
4	2·77372	2·53416	2·31638	2·11828	4
5	3·50217	3·20778	2·93954	2·69499	5
6	4·24518	3·89825	3·58141	3·29188	6
7	5·00306	4·60598	4·24252	3·90966	7
8	5·77609	5·33140	4·92348	4·54906	8
9	6·56458	6·07495	5·62486	5·21085	9
10	7·36885	6·83710	6·34728	5·89579	10
11	8·18919	7·61829	7·09137	6·60471	11
12	9·02595	8·41902	7·85779	7·33844	12
13	9·87944	9·23977	8·64720	8·09786	13
14	10·75000	10·08103	9·46029	8·88385	14
15	11·63797	10·94333	10·29777	9·69735	15
16	12·54370	11·82719	11·16038	10·53932	16
17	13·46755	12·73314	12·04887	11·41076	17
18	14·40987	13·66174	12·96401	12·31271	18
19	15·37104	14·61355	13·90661	13·24622	19
20	16·35143	15·58916	14·87748	14·21240	20
	4 %	**4½** %	**5** %	**12·304**%	
1	·45639	·41465	·37689	·098	1
2	·93103	·84795	·77262	·208	2
3	1·42466	1·30075	1·18814	·332	3
4	1·93803	1·77393	1·62444	·471	4
5	2·47194	2·26839	2·08255	·628	5
6	3·02721	2·78511	2·56357	·803	6
7	3·60468	3·32509	3·06864	1·000	7
8	4·20526	3·88936	3·59896	1·221	8
9	4·82985	4·47902	4·15580	1·470	9
10	5·47943	5·09522	4·74048	1·749	10
11	6·15500	5·73915	5·35439	2·062	11
12	6·85758	6·41205	5·99900	2·414	12
13	7·58828	7·11524	6·67584	2·809	13
14	8·34819	7·85007	7·38652	3·253	14
15	9·13851	8·61796	8·13273	3·751	15
16	9·96043	9·42041	8·91626	4·311	16
17	10·81524	10·25898	9·73896	4·940	17
18	11·70424	11·13527	10·60280	5·646	18
19	12·62879	12·05100	11·50983	6·439	19
20	13·59033	13·00794	12·46221	7·329	20

For explanation see pp. 14–16

Number of Years' Purchase for the Renewal of any Number of Years Expired in a
TWENTY-ONE YEARS' LEASE

Years	**2** %	**$2\frac{1}{2}$** %	**3** %	**$3\frac{1}{2}$** %	Years
1	·65978	·59539	·53754	·48557	1
2	1·33275	1·20566	1·09122	·98813	2
3	2·01918	1·83119	1·66151	1·50829	3
4	2·71934	2·47235	2·24890	2·04665	4
5	3·43350	3·12955	2·85392	2·60385	5
6	4·16195	3·80317	3·47708	3·18056	6
7	4·90496	4·49364	4·11895	3·77745	7
8	5·66284	5·20137	4·78006	4·39523	8
9	6·43587	5·92679	5·46102	5·03463	9
10	7·22436	6·67034	6·16240	5·69642	10
11	8·02863	7·43249	6·88482	6·38136	11
12	8·84897	8·21368	7·62891	7·09028	12
13	9·68573	9·01441	8·39533	7·82401	13
14	10·53922	9·83516	9·18474	8·58343	14
15	11·40978	10·67642	9·99783	9·36942	15
16	12·29775	11·53872	10·83531	10·18292	16
17	13·20348	12·42258	11·69792	11·02489	17
18	14·12733	13·32853	12·58641	11·89633	18
19	15·06965	14·25713	13·50155	12·79828	19
20	16·03082	15·20894	14·44415	13·73179	20
21	17·01121	16·18455	15·41502	14·69797	21

	4 %	**$4\frac{1}{2}$** %	**5** %	**11·564** %	
1	·43883	·39678	·35894	·100	1
2	·89522	·81143	·73583	·213	2
3	1·36986	1·24473	1·13156	·338	3
4	1·86349	1·69753	1·54708	·477	4
5	2·37686	2·17071	1·98338	·633	5
6	2·91077	2·66517	2·44149	·806	6
7	3·46604	3·18189	2·92251	1·000	7
8	4·04351	3·72187	3·42758	1·216	8
9	4·64409	4·28614	3·95790	1·457	9
10	5·26868	4·87580	4·51474	1·726	10
11	5·91826	5·49200	5·09942	2·026	11
12	6·59383	6·13593	5·71333	2·361	12
13	7·29641	6·80883	6·35794	2·734	13
14	8·02711	7·51202	7·03478	3·151	14
15	8·78702	8·24685	7·74546	3·616	15
16	9·57734	9·01474	8·49167	4·135	16
17	10·39926	9·81719	9·27520	4·713	17
18	11·25407	10·65576	10·09790	5·359	18
19	12·14307	11·53205	10·96174	6·079	19
20	13·06762	12·44778	11·86877	6·882	20
21	14·02916	13·40472	12·82115	7·779	21

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

FORTY YEARS' LEASE

Years	2 %	2½ %	3 %	3½ %	Years
I	·45289	·37243	·30655	·25257	I
2	·91484	·75417	·62231	·51398	2
3	1·38603	1·14545	·94753	·78454	3
4	1·86664	1·54652	1·28252	1·06458	4
5	2·35686	1·95761	1·62755	1·35441	5
6	2·85689	2·37898	1·98293	1·65439	6
7	3·36692	2·81089	2·34898	1·96486	7
8	3·88715	3·25359	2·72600	2·28620	8
9	4·41778	3·70737	3·11434	2·61879	9
10	4·95902	4·17248	3·51433	2·96302	10
11	5·51110	4·64922	3·92631	3·31930	11
12	6·07421	5·13788	4·35066	3·68805	12
13	6·64858	5·63876	4·78774	4·06970	13
14	7·23444	6·15216	5·23793	4·46472	14
15	7·83202	6·67839	5·70162	4·87355	15
16	8·44155	7·21778	6·17923	5·29670	16
17	9·06328	7·77066	6·67116	5·73466	17
18	9·69743	8·33736	7·17785	6·18794	18
19	10·34427	8·91822	7·69975	6·65710	19
20	11·00405	9·51361	8·23729	7·14267	20
21	11·67702	10·12388	8·79097	7·64523	21
22	12·36345	10·74941	9·36126	8·16539	22
23	13·06361	11·39057	9·94865	8·70375	23
24	13·77777	12·04777	10·55367	9·26095	24
25	14·50622	12·72139	11·17683	9·83766	25
26	15·24923	13·41186	11·81870	10·43455	26
27	16·00711	14·11959	12·47881	11·05233	27
28	16·78014	14·84501	13·16077	11·69174	28
29	17·56863	15·58856	13·86215	12·35352	29
30	18·37290	16·35071	14·58457	13·03846	30
31	19·19324	17·13190	15·32866	13·74738	31
32	20·03000	17·93263	16·09508	14·48111	32
33	20·88349	18·75338	16·88449	15·24053	33
34	21·75405	19·59465	17·69758	16·02652	34
35	22·64202	20·45694	18·53506	16·84002	35
36	23·54775	21·34080	19·39767	17·68199	36
37	24·47160	22·24675	20·28616	18·55343	37
38	25·41392	23·17535	21·20130	19·45538	38
39	26·37509	24·12716	22·14390	20·38889	39
40	27·35548	25·10277	23·11477	21·35507	40

	Number of Years' Purchase for the Renewal of any Number of Years Expired in a FORTY YEARS' LEASE				
Years	**4 %**	**4½ %**	**5 %**	**8 %**	Years
1	·20828	·17192	·14205	·04603	1
2	·42490	·35159	·29120	·09574	2
3	·65019	·53934	·44780	·14943	3
4	·88449	·73554	·61224	·20742	4
5	1·12816	·94057	·78490	·27004	5
6	1·38157	1·15482	·96619	·33768	6
7	1·64512	1·37872	1·15654	·41072	7
8	1·91922	1·61269	1·35641	·48961	8
9	2·20428	1·85719	1·56628	·57481	9
10	2·50074	2·11269	1·78664	·66683	10
11	2·80905	2·37969	2·01802	·76620	11
12	3·12971	2·65871	2·26096	·87353	12
13	3·46318	2·95028	2·51606	·98945	13
14	3·81000	3·25497	2·78391	1·11463	14
15	4·17069	3·57337	3·06515	1·24983	15
16	4·54581	3·90610	3·36045	1·39585	16
17	4·93593	4·25381	3·67052	1·55355	17
18	5·34165	4·61716	3·99609	1·72387	18
19	5·76361	4·99686	4·33794	1·90781	19
20	6·20244	5·39364	4·69688	2·10646	20
21	6·65883	5·80829	5·07377	2·32101	21
22	7·13347	6·24159	5·46950	2·55272	22
23	7·62710	6·69439	5·88502	2·80297	23
24	8·14047	7·16757	6·32132	3·07324	24
25	8·67438	7·66203	6·77943	3·36513	25
26	9·22965	8·17875	7·26045	3·68037	26
27	9·80712	8·71873	7·76552	4·02083	27
28	10·40770	9·28300	8·29584	4·38853	28
29	11·03229	9·87266	8·85268	4·78565	29
30	11·68187	10·48886	9·43736	5·21453	30
31	12·35744	11·13279	10·05127	5·67772	31
32	13·06002	11·80569	10·69588	6·17797	32
33	13·79072	12·50888	11·37272	6·71824	33
34	14·55063	13·24371	12·08340	7·30173	34
35	15·34095	14·01160	12·82961	7·93190	35
36	16·16287	14·81405	13·61314	8·61248	36
37	17·01768	15·65262	14·43584	9·34751	37
38	17·90668	16·52891	15·29968	10·14135	38
39	18·83123	17·44464	16·20671	10·99868	39
40	19·79277	18·40158	17·15909	11·92461	40

The Percentage per Annum which each Number of Years' Purchase of a Perpetuity allows the Purchaser

Years	PER CENT. PER ANNUM				Years
	£	£	s.	d.	
1	100	100	0	0	1
2	50	50	0	0	2
3	33·3̇	33	6	8	3
4	25	25	0	0	4
5	20	20	0	0	5
6	16·6̇	16	13	4	6
7	14·2857	14	5	8½	7
8	12·5	12	10	0	8
9	11·1̇	11	2	2¾	9
10	10	10	0	0	10
11	9·0̇9̇	9	1	9¾	11
12	8·3̇	8	6	8	12
13	7·69230̇	7	13	10¼	13
14	7·14285̇	7	2	10¼	14
15	6·6̇	6	13	4	15
16	6·25	6	5	0	16
17	5·88235	5	17	7¾	17
18	5·5̇	5	11	1¼	18
19	5·26316	5	5	3¾	19
20	5	5	0	0	20
21	4·7̇619	4	15	2¾	21
22	4·5̇	4	10	11	22
23	4·3478	4	6	11½	23
24	4·1̇6	4	3	4	24
25	4	4	0	0	25
26	3·84615̇	3	16	11	26
27	3·7̇0̇	3	14	1	27
28	3·5714	3	11	5¼	28
29	3·4483	3	8	11½	29
30	3·3̇	3	6	8	30
31	3·2258	3	4	6¼	31
32	3·125	3	2	6	32
33	3·0̇3̇	3	0	7¼	33
34	2·9412	2	18	10	34
35	2·85714̇	2	17	1¾	35
36	2·7̇	2	15	6½	36
37	2·7̇0̇	2	14	0¾	37
38	2·6316	2	12	7½	38
39	2·56410̇	2	11	3½	39
40	2·5	2	10	0	40
41	2·4390̇	2	8	9¼	41
42	2·38095	2	7	7½	42
43	2·32558	2	6	6¼	43
44	2·2̇7	2	5	5½	44
45	2·2̇	2	4	5¼	45
46	2·17391	2	3	5¾	46
47	2·12766	2	2	6¾	47
48	2·083̇	2	1	8	48
49	2·0408	2	0	9¾	49
50	2·0	2	0	0	50

For explanation see p. 16

INTEREST, AMOUNT, AND DISCOUNT OF £1 IN A YEAR, NINE, SIX, AND THREE MONTHS				
Interest per Annum	Period	Interest	Amount	Discount
1 %	1 year 9 months 6 ,, 3 ,,	·01 ·0075 ·005 ·0025	1·01 1·0075 1·005 1·0025	·009901 ·007444 ·004975 ·002494
1½ %	1 year 9 months 6 ,, 3 ,,	·015 ·01125 ·0075 ·00375	1·015 1·01125 1·0075 1·00375	·014778 ·011125 ·007444 ·003736
1¾ %	1 year 9 months 6 ,, 3 ,,	·0175 ·013125 ·00875 ·004375	1·0175 1·013125 1·00875 1·004375	·017199 ·012955 ·008674 ·004356
2 %	1 year 9 months 6 ,, 3 ,,	·02 ·015 ·01 ·005	1·02 1·015 1·01 1·005	·019608 ·014778 ·009901 ·004975
2¼ %	1 year 9 months 6 ,, 3 ,,	·0225 ·016875 ·01125 ·005625	1·0225 1·016875 1·01125 1·005625	·022005 ·016595 ·011125 ·005593
2½ %	1 year 9 months 6 ,, 3 ,,	·025 ·01875 ·0125 ·00625	1·025 1·01875 1·0125 1·00625	·024390 ·018405 ·012346 ·006211
2¾ %	1 year 9 months 6 ,, 3 ,,	·0275 ·020625 ·01375 ·006875	1·0275 1·020625 1·01375 1·006875	·026764 ·020208 ·013563 ·006828
3 %	1 year 9 months 6 ,, 3 ,,	·03 ·0225 ·015 ·0075	1·03 1·0225 1·015 1·0075	·029126 ·022005 ·014778 ·007444
3½ %	1 year 9 months 6 ,, 3 ,,	·035 ·02625 ·0175 ·00875	1·035 1·02625 1·0175 1·00875	·033816 ·025579 ·017199 ·008674
4 %	1 year 9 months 6 ,, 3 ,,	·04 ·03 ·02 ·01	1·04 1·03 1·02 1·01	·038462 ·029126 ·019608 ·009901
4½ %	1 year 9 months 6 ,, 3 ,,	·045 ·03375 ·0225 ·01125	1·045 1·03375 1·0225 1·01125	·043062 ·032648 ·022005 ·011125
5 %	1 year 9 months 6 ,, 3 ,,	·05 ·0375 ·025 ·0125	1·05 1·0375 1·025 1·0125	·047619 ·036145 ·024390 ·012346

For explanation see p. 16

SINKING FUND FOR THE REPAYMENT OF LOANS

Years	1 %	1¼ %	1½ %	1¾ %	Years
I	I·000000	I·000000	I·000000	I·000000	I
2	·497512	·496893	·496278	·495663	2
3	·330022	·329202	·328383	·327567	3
4	·246281	·245361	·244445	·243532	4
5	·196040	·195062	·194089	·193121	5
6	·162548	·161534	·160525	·159523	6
7	·138628	·137589	·136556	·135531	7
8	·120690	·119633	·118584	·117543	8
9	·106740	·105671	·104609	·103558	9
10	·095582	·094503	·093434	·092375	10
II	·086454	·085367	·084294	·083231	II
12	·078849	·077758	·076680	·075614	12
13	·072415	·071321	·070240	·069173	13
14	·066901	·065805	·064723	·063656	14
15	·062124	·061026	·059944	·058877	15
16	·057945	·056847	·055765	·054700	16
17	·054258	·053160	·052080	·051016	17
18	·050982	·049884	·048806	·047745	18
19	·048052	·046955	·045878	·044821	19
20	·045415	·044320	·043246	·042191	20
21	·043031	·041937	·040866	·039815	21
22	·040864	·039770	·038703	·037656	22
23	·038886	·037897	·036731	·035688	23
24	·037073	·035987	·034924	·033886	24
25	·035407	·034322	·033263	·032230	25
26	·033869	·032787	·031732	·030703	26
27	·032446	·031367	·030315	·029291	27
28	·031124	·030049	·029001	·027982	28
29	·029895	·028822	·027779	·026764	29
30	·028748	·027679	·026639	·025630	30
31	·027676	·026609	·025574	·024570	31
32	·026671	·025608	·024577	·023578	32
33	·025728	·024668	·023641	·022648	33
34	·024840	·023784	·022762	·021774	34
35	·024004	·022951	·021934	·020951	35
36	·023214	·022165	·021152	·020175	36
37	·022468	·021424	·020414	·019443	37
38	·021762	·020720	·019716	·018750	38
39	·021092	·020054	·019055	·018094	39
40	·020456	·019421	·018427	·017472	40
41	·019851	·018821	·017831	·016882	41
42	·019276	·018249	·017264	·016321	42
43	·018727	·017705	·016725	·015787	43
44	·018204	·017186	·016210	·015278	44
45	·017705	·016690	·015720	·014793	45
46	·017228	·016217	·015251	·014330	46
47	·016771	·015764	·014803	·013888	47
48	·016334	·015331	·014375	·013466	48
49	·015915	·014916	·013965	·013061	49
50	·015513	·014518	·013572	·012674	50

For explanation see pp. 16, 17

		SINKING FUND FOR THE REPAYMENT OF LOANS			
Years	1 %	1¼ %	1½ %	1¾ %	Years
51	·015127	·014136	·013195	·012303	51
52	·014756	·013769	·012833	·011947	52
53	·014400	·013416	·012485	·011605	53
54	·014057	·013078	·012151	·011277	54
55	·013726	·012751	·011830	·010961	55
56	·013408	·012437	·011521	·010658	56
57	·013102	·012135	·011223	·010366	57
58	·012806	·011843	·010937	·010085	58
59	·012520	·011562	·010660	·009814	59
60	·012244	·011290	·010393	·009553	60
61	·011978	·011028	·010136	·009302	61
62	·011720	·010774	·009888	·009059	62
63	·011471	·010529	·009647	·008825	63
64	·011230	·010292	·009416	·008598	64
65	·010997	·010063	·009191	·008379	65
66	·010771	·009841	·008974	·008168	66
67	·010551	·009626	·008764	·007964	67
68	·010339	·009417	·008560	·007766	68
69	·010133	·009215	·008363	·007575	69
70	·009933	·009019	·008172	·007389	70
71	·009739	·008829	·007987	·007210	71
72	·009550	·008645	·007808	·007036	72
73	·009367	·008466	·007634	·006868	73
74	·009189	·008292	·007465	·006704	74
75	·009016	·008123	·007301	·006546	75
76	·008848	·007959	·007141	·006392	76
77	·008684	·007800	·006987	·006243	77
78	·008525	·007644	·006836	·006098	78
79	·008370	·007493	·006690	·005958	79
80	·008219	·007347	·006548	·005821	80
81	·008072	·007203	·006410	·005688	81
82	·007929	·007064	·006276	·005559	82
83	·007789	·006929	·006145	·005434	83
84	·007653	·006797	·006018	·005312	84
85	·007520	·006668	·005894	·005194	85
86	·007390	·006543	·005773	·005078	86
87	·007264	·006420	·005656	·004966	87
88	·007141	·006301	·005541	·004857	88
89	·007021	·006185	·005430	·004751	89
90	·006903	·006071	·005321	·004648	90
91	·006789	·005961	·005215	·004547	91
92	·006676	·005853	·005112	·004449	92
93	·006567	·005747	·005011	·004353	93
94	·006460	·005644	·004913	·004260	94
95	·006355	·005544	·004817	·004169	95
96	·006253	·005445	·004723	·004081	96
97	·006153	·005349	·004632	·003995	97
98	·006055	·005256	·004543	·003911	98
99	·005959	·005164	·004456	·003829	99
100	·005866	·005074	·004371	·003749	100

SINKING FUND FOR THE REPAYMENT OF LOANS

Years	2 %	2¼ %	2½ %	2¾ %	Years
I	I·000000	I·000000	I·000000	I·000000	I
2	·495049	·494438	·493827	·493222	2
3	·326755	·325945	·325137	·324332	3
4	·242624	·241719	·240818	·239920	4
5	·192158	·191200	·190247	·189298	5
6	·158526	·157535	·156550	·155571	6
7	·134512	·133500	·132495	·131497	7
8	·116509	·115485	·114467	·113458	8
9	·102515	·101482	·100457	·099441	9
10	·091326	·090288	·089259	·088240	10
II	·082178	·081136	·080106	·079086	II
12	·074560	·073517	·072487	·071469	12
13	·068118	·067077	·066048	·065033	13
14	·062602	·061562	·060536	·059525	14
15	·057825	·056789	·055766	·054759	15
16	·053650	·052617	·051599	·050597	16
17	·049970	·048940	·047928	·046932	17
18	·046702	·045677	·044670	·043681	18
19	·043782	·042762	·041760	·040778	19
20	·041157	·040142	·039147	·038172	20
21	·038785	·037776	·036787	·035819	21
22	·036631	·035628	·034646	·033686	22
23	·034668	·033671	·032696	·031744	23
24	·032871	·031880	·030913	·029969	24
25	·031221	·030236	·029276	·028340	25
26	·029699	·028721	·027768	·026841	26
27	·028293	·027322	·026377	·025458	27
28	·026990	·026025	·025088	·024177	28
29	·025779	·024821	·023891	·022989	29
30	·024650	·023699	·022777	·021884	30
31	·023596	·022653	·021739	·020855	31
32	·022611	·021674	·020768	·019893	32
33	·021687	·020757	·019859	·018993	33
34	·020819	·019897	·019007	·018149	34
35	·020002	·019087	·018205	·017356	35
36	·019233	·018325	·017451	·016611	36
37	·018507	·017606	·016741	·015910	37
38	·017821	·016928	·016070	·015248	38
39	·017171	·016285	·015436	·014623	39
40	·016556	·015677	·014836	·014032	40
41	·015972	·015101	·014268	·013472	41
42	·015417	·014554	·013728	·012942	42
43	·014890	·014034	·013217	·012439	43
44	·014388	·013539	·012730	·011961	44
45	·013910	·013068	·012267	·011507	45
46	·013453	·012619	·011826	·011075	46
47	·013018	·012191	·011407	·010664	47
48	·012602	·011782	·011006	·010272	48
49	·012204	·011392	·010623	·009898	49
50	·011823	·011018	·010258	·009541	50

SINKING FUND FOR THE REPAYMENT OF LOANS

Years	2 %	2¼ %	2½ %	2¾ %	Years
51	·011459	·010661	·009909	·009200	51
52	·011109	·010319	·009574	·008874	52
53	·010774	·009991	·009254	·008563	53
54	·010452	·009677	·008948	·008265	54
55	·010143	·009375	·008654	·007980	55
56	·009847	·009085	·008373	·007706	56
57	·009561	·008807	·008102	·007444	57
58	·009287	·008540	·007842	·007193	58
59	·009022	·008283	·007593	·006952	59
60	·008768	·008035	·007353	·006720	60
61	·008523	·007797	·007123	·006498	61
62	·008286	·007568	·006901	·006284	62
63	·008058	·007347	·006688	·006079	63
64	·007839	·007134	·006482	·005881	64
65	·007626	·006929	·006285	·005691	65
66	·007421	·006731	·006094	·005508	66
67	·007223	·006540	·005910	·005332	67
68	·007032	·006355	·005733	·005163	68
69	·006847	·006177	·005562	·005000	69
70	·006668	·006005	·005397	·004842	70
71	·006494	·005838	·005238	·004690	71
72	·006327	·005677	·005084	·004544	72
73	·006165	·005522	·004936	·004403	73
74	·006007	·005371	·004792	·004267	74
75	·005855	·005226	·004654	·004136	75
76	·005708	·005085	·004519	·004009	76
77	·005564	·004948	·004390	·003886	77
78	·005426	·004816	·004265	·003768	78
79	·005291	·004688	·004143	·003654	79
80	·005161	·004564	·004026	·003543	80
81	·005034	·004444	·003912	·003437	81
82	·004911	·004327	·003803	·003334	82
83	·004792	·004214	·003696	·003234	83
84	·004676	·004104	·003593	·003137	84
85	·004563	·003998	·003493	·003044	85
86	·004454	·003895	·003396	·002954	86
87	·004348	·003795	·003303	·002867	87
88	·004244	·003697	·003212	·002782	88
89	·004144	·003603	·003124	·002700	89
90	·004046	·003511	·003038	·002621	90
91	·003951	·003422	·002955	·002545	91
92	·003859	·003336	·002875	·002470	92
93	·003769	·003252	·002797	·002399	93
94	·003681	·003170	·002721	·002329	94
95	·003596	·003091	·002648	·002261	95
96	·003513	·003014	·002577	·002196	96
97	·003432	·002939	·002507	·002133	97
98	·003354	·002866	·002440	·002071	98
99	·003277	·002795	·002375	·002012	99
100	·003203	·002726	·002312	·001954	100

		SINKING FUND FOR THE REPAYMENT OF LOANS			
Years	**3** %	**3¼** %	**3½** %	**3¾** %	Years
I	I ·000000	I ·000000	I ·000000	I ·000000	I
2	·492611	·492005	·491400	·490798	2
3	·323530	·322731	·321934	·321140	3
4	·239027	·238137	·237251	·236369	4
5	·188355	·187415	·186481	·185552	5
6	·154598	·153630	·152668	·151712	6
7	·130506	·129522	·128544	·127574	7
8	·112456	·111463	·110477	·109498	8
9	·098434	·097436	·096446	·095465	9
10	·087231	·086231	·085241	·084261	10
11	·078077	·077079	·076092	·075115	11
12	·070462	·069467	·068484	·067512	12
13	·064030	·063039	·062062	·061096	13
14	·058526	·057542	·056571	·055613	14
15	·053767	·052789	·051825	·050876	15
16	·049611	·048640	·047685	·046745	16
17	·045953	·044990	·044043	·043113	17
18	·042709	·041754	·040817	·039897	18
19	·039814	·038868	·037940	·037031	19
20	·037216	·036279	·035361	·034462	20
21	·034872	·033944	·033037	·032149	21
22	·032747	·031829	·030932	·030055	22
23	·030814	·029906	·029019	·028153	23
24	·029047	·028149	·027273	·026419	24
25	·027428	·026539	·025674	·024832	25
26	·025938	·025060	·024205	·023375	26
27	·024564	·023696	·022852	·022033	27
28	·023293	·022435	·021603	·020795	28
29	·022115	·021267	·020445	·019650	29
30	·021019	·020182	·019371	·018588	30
31	·019999	·019172	·018372	·017600	31
32	·019047	·018230	·017442	·016681	32
33	·018156	·017350	·016572	·015824	33
34	·017322	·016526	·015760	·015023	34
35	·016539	·015753	·014998	·014273	35
36	·015804	·015028	·014284	·013571	36
37	·015112	·014346	·013613	·012911	37
38	·014459	·013704	·012982	·012292	38
39	·013844	·013099	·012388	·011709	39
40	·013262	·012528	·011827	·011159	40
41	·012712	·011988	·011298	·010642	41
42	·012192	·011478	·010798	·010153	42
43	·011698	·010994	·010325	·009691	43
44	·011230	·010536	·009878	·009254	44
45	·010785	·010101	·009453	·008841	45
46	·010363	·009688	·009051	·008449	46
47	·009961	·009296	·008669	·008078	47
48	·009578	·008923	·008306	·007726	48
49	·009213	·008568	·007962	·007392	49
50	·008866	·008230	·007634	·007074	50

For explanation see pp. 16, 17

		SINKING FUND FOR THE REPAYMENT OF LOANS			
Years	3 %	3¼ %	3½ %	3¾ %	Years
51	·008534	·007908	·007322	·006772	51
52	·008217	·007601	·007024	·006485	52
53	·007915	·007308	·006741	·006212	53
54	·007626	·007028	·006471	·005952	54
55	·007349	·006761	·006213	·005704	55
56	·007085	·006506	·005967	·005468	56
57	·006831	·006261	·005732	·005242	57
58	·006588	·006028	·005508	·005028	58
59	·006356	·005804	·005294	·004822	59
60	·006133	·005590	·005089	·004627	60
61	·005919	·005385	·004892	·004440	61
62	·005714	·005188	·004705	·004261	62
63	·005517	·005000	·004525	·004090	63
64	·005328	·004819	·004353	·003927	64
65	·005146	·004646	·004188	·003771	65
66	·004971	·004479	·004030	·003621	66
67	·004803	·004320	·003879	·003478	67
68	·004642	·004166	·003734	·003341	68
69	·004486	·004019	·003595	·003210	69
70	·004337	·003877	·003461	·003085	70
71	·004193	·003741	·003333	·002964	71
72	·004054	·003610	·003210	·002849	72
73	·003921	·003484	·003092	·002738	73
74	·003792	·003363	·002978	·002633	74
75	·003668	·003247	·002869	·002531	75
76	·003548	·003135	·002764	·002434 ·	76
77	·003433	·003027	·002664	·002340	77
78	·003322	·002923	·002567	·002250	78
79	·003215	·002823	·002474	·002164	79
80	·003112	·002727	·002385	·002082	80
81	·003012	·002634	·002299	·002003	81
82	·002916	·002545	·002216	·001926	82
83	·002823	·002459	·002137	·001853	83
84	·002733	·002376	·002060	·001783	84
85	·002647	·002295	·001987	·001716	85
86	·002563	·002218	·001916	·001651	86
87	·002482	·002144	·001848	·001589	87
88	·002404	·002072	·001782	·001529	88
89	·002329	·002003	·001719	·001472	89
90	·002256	·001936	·001658	·001416	90
91	·002185	·001872	·001599	·001363	91
92	·002117	·001809	·001543	·001312	92
93	·002051	·001749	·001488	·001263	93
94	·001987	·001691	·001436	·001216	94
95	·001926	·001635	·001385	·001171	95
96	·001866	·001582	·001337	·001127	96
97	·001809	·001529	·001290	·001085	97
98	·001753	·001479	·001245	·001045	98
99	·001699	·001430	·001201	·001006	99
100	·001647	·001384	·001159	·000969	100

Years	4 %	4¼ %	4½ %	5 %	Years
1	1·000000	1·000000	1·000000	1·000000	1
2	·490196	·489596	·488997	·487805	2
3	·320349	·319559	·318773	·317209	3
4	·235490	·234615	·233744	·232012	4
5	·184627	·183707	·182792	·180975	5
6	·150762	·149817	·148878	·147017	6
7	·126610	·125652	·124701	·122820	7
8	·108528	·107565	·106609	·104722	8
9	·094493	·093529	·092575	·090690	9
10	·083291	·082330	·081379	·079505	10
11	·074149	·073193	·072248	·070389	11
12	·066552	·065603	·064666	·062825	12
13	·060144	·059203	·058275	·056456	13
14	·054669	·053738	·052820	·051024	14
15	·049941	·049020	·048114	·046342	15
16	·045820	·044910	·044015	·042270	16
17	·042199	·041300	·040418	·038699	17
18	·038993	·038107	·037237	·035546‒	18
19	·036139	·035264	·034407	·032745	19
20	·033582	·032720	·031876	·030243	20
21	·031280	·030431	·029601	·027996	21
22	·029199	·028362	·027546	·025971	22
23	·027309	·026486	·025682	·024137	23
24	·025587	·024776	·023987	·022471	24
25	·024012	·023215	·022439	·020952	25
26	·022567	·021783	·021021	·019564	26
27	·021239	·020467	·019719	·018292	27
28	·020013	·019255	·018521	·017123	28
29	·018880	·018135	·017415	·016046	29
30	·017830	·017098	·016392	·015051	30
31	·016855	·016137	·015443	·014132	31
32	·015949	·015243	·014563	·013280	32
33	·015104	·014411	·013745	·012490	33
34	·014315	·013635	·012982	·011755	34
35	·013577	·012910	·012270	·011072	35
36	·012887	·012232	·011606	·010434	36
37	·012240	·011597	·010984	·009840	37
38	·011632	·011002	·010402	·009284	38
39	·011061	·010444	·009856	·008765	39
40	·010523	·009918	·009343	·008278	40
41	·010017	·009424	·008862	·007822	41
42	·009540	·008959	·008409	·007395	42
43	·009090	·008521	·007982	·006993	43
44	·008665	·008107	·007581	·006616	44
45	·008262	·007717	·007202	·006262	45
46	·007882	·007348	·006845	·005928	46
47	·007522	·006999	·006507	·005614	47
48	·007181	·006669	·006189	·005318	48
49	·006857	·006356	·005887	·005040	49
50	·006550	·006060	·005602	·004777	50

For explanation see pp. 16, 17

		SINKING FUND FOR THE REPAYMENT OF LOANS			
Years	**4 %**	**4¼ %**	**4½ %**	**5 %**	Years
51	·006259	·005779	·005332	·004529	51
52	·005982	·005513	·005077	·004295	52
53	·005719	·005261	·004835	·004073	53
54	·005469	·005021	·004605	·003864	54
55	·005231	·004793	·004388	·003667	55
56	·005005	·004577	·004181	·003480	56
57	·004789	·004371	·003985	·003303	57
58	·004584	·004175	·003799	·003136	58
59	·004388	·003989	·003622	·002978	59
60	·004202	·003812	·003454	·002828	60
61	·004024	·003643	·003295	·002686	61
62	·003854	·003482	·003143	·002552	62
63	·003692	·003329	·002998	·002424	63
64	·003538	·003183	·002861	·002304	64
65	·003390	·003044	·002730	·002189	65
66	·003249	·002912	·002606	·002081	66
67	·003115	·002785	·002488	·001978	67
68	·002986	·002665	·002375	·001880	68
69	·002863	·002549	·002267	·001787	69
70	·002745	·002440	·002165	·001699	70
71	·002633	·002335	·002068	·001616	71
72	·002525	·002234	·001975	·001536	72
73	·002422	·002139	·001886	·001461	73
74	·002323	·002047	·001802	·001390	74
75	·002229	·001960	·001721	·001322	75
76	·002139	·001877	·001644	·001257	76
77	·002052	·001797	·001571	·001196	77
78	·001969	·001721	·001501	·001138	78
79	·001890	·001648	·001434	·001082	79
80	·001814	·001578	·001371	·001030	80
81	·001741	·001511	·001310	·000980	81
82	·001672	·001448	·001252	·000932	82
83	·001605	·001387	·001197	·000887	83
84	·001541	·001329	·001144	·000844	84
85	·001479	·001273	·001093	·000803	85
86	·001420	·001219	·001045	·000764	86
87	·001364	·001168	·000999	·000727	87
88	·001310	·001119	·000955	·000692	88
89	·001258	·001073	·000913	·000659	89
90	·001208	·001028	·000873	·000627	90
91	·001160	·000985	·000835	·000597	91
92	·001114	·000944	·000798	·000568	92
93	·001070	·000905	·000763	·000541	93
94	·001028	·000867	·000730	·000515	94
95	·000987	·000831	·000698	·000490	95
96	·000949	·000796	·000667	·000466	96
97	·000911	·000763	·000638	·000444	97
98	·000875	·000732	·000610	·000423	98
99	·000841	·000701	·000584	·000402	99
100	·000808	·000672	·000558	·000383	100

F

	SINKING FUND FOR THE REPAYMENT OF LOANS				
Years	6 %	7 %	8 %	10 %	Years
I	I ·000000	I ·000000	I ·000000	I ·000000	I
2	·485437	·483092	·480769	·476190	2
3	·314110	·311052	·308033	·302115	3
4	·228591	·225228	·221921	·215471	4
5	·177396	·173891	·170456	·163798	5
6	·143363	·139796	·136315	·129607	6
7	·119135	·115553	·112072	·105406	7
8	·101036	·097468	·094015	·087444	8
9	·087022	·083486	·080079	·073641	9
10	·075868	·072377	·069029	·062745	10
11	·066793	·063357	·060076	·053963	11
12	·059277	·055902	·052695	·046763	12
13	·052960	·049651	·046522	·040779	13
14	·047585	·044345	·041297	·035746	14
15	·042963	·039795	·036829	·031474	15
16	·038952	·035858	·032977	·027817	16
17	·035445	·032425	·029629	·024664	17
18	·032357	·029413	·026702	·021930	18
19	·029621	·026753	·024128	·019547	19
20	·027185	·024393	·021852	·017460	20
21	·025005	·022289	·019832	·015624	21
22	·023046	·020406	·018032	·014005	22
23	·021278	·018714	·016422	·012572	23
24	·019679	·017189	·014978	·011300	24
25	·018227	·015811	·013679	·010168	25
26	·016904	·014561	·012507	·009159	26
27	·015697	·013426	·011448	·008258	27
28	·014593	·012392	·010489	·007451	28
29	·013580	·011449	·009618	·006728	29
30	·012649	·010586	·008827	·006079	30
31	·011792	·009797	·008107	·005496	31
32	·011002	·009073	·007451	·004972	32
33	·010273	·008408	·006852	·004499	33
34	·009598	·007797	·006304	·004074	34
35	·008974	·007234	·005803	·003689	35
36	·008395	·006715	·005345	·003343	36
37	·007857	·006237	·004924	·003030	37
38	·007358	·005795	·004539	·002747	38
39	·006894	·005387	·004185	·002491	39
40	·006462	·005009	·003860	·002259	40
41	·006059	·004660	·003562	·002050	41
42	·005683	·004336	·003287	·001860	42
43	·005333	·004036	·003034	·001688	43
44	·005006	·003758	·002802	·001532	44
45	·004701	·003499	·002587	·001391	45
46	·004415	·003260	·002390	·001263	46
47	·004148	·003037	·002208	·001147	47
48	·003898	·002831	·002040	·001041	48
49	·003664	·002639	·001886	·000946	49
50	·003444	·002460	·001743	·000859	50

	SINKING FUND FOR THE REPAYMENT OF LOANS				
Years	6 %	7 %	8 %	10 %	Years
51	·003239	·002294	·001611	·000780	51
52	·003046	·002139	·001490	·000709	52
53	·002866	·001995	·001377	·000644	53
54	·002696	·001861	·001274	·000585	54
55	·002537	·001736	·001178	·000532	55
56	·002388	·001620	·001090	·000483	56
57	·002247	·001512	·001008	·000439	57
58	·002116	·001411	·000932	·000399	58
59	·001992	·001317	·000862	·000363	59
60	·001876	·001229	·000798	·000329	60
61	·001766	·001147	·000738	·000299	61
62	·001664	·001071	·000683	·000272	62
63	·001567	·001000	·000632	·000247	63
64	·001476	·000934	·000585	·000225	64
65	·001391	·000872	·000541	·000204	65
66	·001310	·000814	·000501	·000186	66
67	·001235	·000760	·000464	·000169	67
68	·001163	·000710	·000429	·000153	68
69	·001096	·000663	·000397	·000139	69
70	·001033	·000620	·000368	·000127	70
71	·000974	·000579	·000340	·000115	71
72	·000918	·000541	·000315	·000105	72
73	·000865	·000505	·000292	·000095	73
74	·000815	·000472	·000270	·000086	74
75	·000769	·000441	·000250	·000079	75
76	·000725	·000412	·000231	·000072	76
77	·000683	·000385	·000214	·000065	77
78	·000644	·000359	·000198	·000059	78
79	·000607	·000336	·000183	·000054	79
80	·000573	·000314	·000170	·000049	80
81	·000540	·000293	·000157	·000044	81
82	·000509	·000274	·000146	·000040	82
83	·000480	·000256	·000135	·000037	83
84	·000453	·000239	·000125	·000033	84
85	·000427	·000223	·000116	·000030	85
86	·000402	·000209	·000107	·000028	86
87	·000380	·000195	·000099	·000025	87
88	·000358	·000182	·000092	·000023	88
89	·000338	·000170	·000085	·000021	89
90	·000318	·000159	·000079	·000019	90
91	·000300	·000149	·000073	·000017	91
92	·000283	·000139	·000067	·000015	92
93	·000267	·000130	·000062	·000014	93
94	·000252	·000121	·000058	·000013	94
95	·000238	·000113	·000053	·000012	95
96	·000224	·000106	·000049	·000011	96
97	·000211	·000099	·000046	·000010	97
98	·000199	·000092	·000042	·000009	98
99	·000188	·000086	·000039	·000008	99
100	·000177	·000081	·000036	·000007	100

F 2

	Value of an Annuity Yielding Interest on Capital at 3 and 3½ PER CENT., and Replacing Capital when Invested at Lower Rates					
Yrs.	**3 & 2 %**	**3 & 2½ %**	**3½ & 2 %**	**3½ & 2½ %**	**3½ & 3 %**	Yrs.
I	·97087	·97087	·96618	·96618	·96618	I
2	1·90458	1·90903	1·88662	1·89098	1·89534	2
3	2·80304	2·81582	2·76430	2·77672	2·78916	3
4	3·66806	3·69252	3·60200	3·62558	3·64928	4
5	4·50129	4·54036	4·40221	4·43957	4·47719	5
6	5·30431	5·36050	5·16727	5·22057	5·27433	6
7	6·07858	6·15402	5·89929	5·97031	6·04206	7
8	6·82548	6·92198	6·60023	6·68991	6·78167	8
9	7·54629	7·66537	7·27191	7·38242	7·49435	9
10	8·24222	8·38513	7·91599	8·04772	8·18126	10
11	8·91441	9·08216	8·53403	8·68765	8·84349	11
12	9·56392	9·75732	9·12745	9·30344	9·48208	12
13	10·19177	10·41143	9·69759	9·89626	10·09800	13
14	10·79891	11·04526	10·24569	10·46720	10·69217	14
15	11·38628	11·65957	10·77291	11·01729	11·26550	15
16	11·95455	12·25505	11·28073	11·54748	11·81881	16
17	12·50471	12·83239	11·76881	12·05869	12·35292	17
18	13·03745	13·39224	12·23958	12·55176	12·86857	18
19	13·55348	13·93522	12·69329	13·02751	13·36650	19
20	14·05349	14·46192	13·13082	13·48670	13·84740	20
21	14·53810	14·97290	13·55293	13·93003	14·31193	21
22	15·00794	15·46872	13·96036	14·35820	14·76071	22
23	15·46357	15·94988	14·35377	14·77184	15·19436	23
24	15·90556	16·41690	14·73381	15·17155	15·61343	24
25	16·33441	16·87025	15·10108	15·55792	16·01848	25
26	16·75063	17·31040	15·45613	15·93150	16·41004	26
27	17·15469	17·73777	15·79951	16·29278	16·78860	27
28	17·54704	18·15279	16·13172	16·64227	17·15465	28
29	17·92810	18·55588	16·45322	16·98045	17·50864	29
30	18·29828	18·94742	16·76448	17·30773	17·85100	30
31	18·65799	19·32778	17·06591	17·62456	18·18217	31
32	19·00757	19·69733	17·35791	17·93133	18·50254	32
33	19·34740	20·05640	17·64087	18·22842	18·81251	33
34	19·67781	20·40535	17·91515	18·51620	19·11243	34
35	19·99912	20·74448	18·18109	18·79502	19·40267	35
36	20·31164	21·07412	18·43900	19·06523	19·68357	36
37	20·61567	21·39454	18·68922	19·32707	19·95545	37
38	20·91150	21·70604	18·93202	19·58092	20·21863	38
39	21·19940	22·00890	19·16768	19·82705	20·47340	39
40	21·47962	22·30339	19·39648	20·06572	20·72007	40
41	21·75243	22·58975	19·61866	20·29721	20·95891	41
42	22·01804	22·86825	19·83446	20·52200	21·19018	42
43	22·27671	23·13910	20·04412	20·73962	21·41414	43
44	22·52864	23·40256	20·24786	20·95102	21·63105	44
45	22·77405	23·65883	20·44588	21·15618	21·84113	45
46	23·01315	23·90814	20·63838	21·35531	22·04462	46
47	23·24613	24·15069	20·82556	21·54862	22·24174	47
48	23·47317	24·38668	21·00759	21·73630	22·43270	48
49	23·69446	24·61630	21·18466	22·09863	22·61771	49
50	23·91017	24·83975	21·35693	22·09569	22·79696	50

For explanation see p. 18

	Value of an Annuity Yielding Interest on Capital at 3 and $3\frac{1}{2}$ PER CENT., and Replacing Capital when Invested at Lower Rates					
Yrs.	3 & 2 %	3 & $2\frac{1}{2}$ %	$3\frac{1}{2}$ & 2 %	$3\frac{1}{2}$ & $2\frac{1}{2}$ %	$3\frac{1}{2}$ & 3 %	Yrs.
51	24·12044	25·05719	21·52456	22·26740	22·97064	51
52	24·32552	25·26882	21·68770	22·42437	23·13894	52
53	24·52548	25·47479	21·84650	22·59657	23·30203	53
54	24·72049	25·67527	22·00110	22·75417	23·46009	54
55	24·91071	25·87041	22·15164	22·90731	23·61327	55
56	25·09626	26·06038	22·29825	23·05612	23·76173	56
57	25·27729	26·24531	22·44105	23·20076	23·90563	57
58	25·45392	26·42536	22·58016	23·34134	24·04512	58
59	25·62628	26·60065	22·71569	23·47800	24·18033	59
60	25·79449	26·77133	22·84776	23·61086	24·31140	60
61	25·95866	26·93751	22·97647	23·74003	24·43847	61
62	26·11891	27·09935	23·10193	23·86563	24·56167	62
63	26·27535	27·25694	23·22423	23·98777	24·68111	63
64	26·42807	27·41041	23·34346	24·10656	24·79691	64
65	26·57719	27·55988	23·45973	24·22209	24·90920	65
66	26·72280	27·70545	23·57311	24·33446	25·01807	66
67	26·86500	27·84723	23·68369	24·44377	25·12365	67
68	27·00387	27·98533	23·79155	24·55012	25·22603	68
69	27·13951	28·11985	23·89677	24·65358	25·32532	69
70	27·27200	28·25089	23·99943	24·75424	25·42160	70
71	27·40142	28·37853	24·09960	24·85219	25·51498	71
72	27·52786	28·50289	24·19720	24·94751	25·60554	72
73	27·65140	28·62403	24·29275	25·04027	25·69338	73
74	27·77210	28·74206	24·38587	25·13054	25·77857	74
75	27·89005	28·85705	24·47676	25·21840	25·86120	75
76	28·00531	28·96908	24·56549	25·30392	25·94135	76
77	28·11795	29·07825	24·65212	25·38717	26·01910	77
78	28·22805	29·18461	24·73670	25·46821	26·09451	78
79	28·33565	29·28826	24·81930	25·54710	26·16766	79
80	28·44084	29·38925	24·89996	25·62391	26·23863	80
81	28·54366	29·48767	24·97874	25·69869	26·30747	81
82	28·64418	29·58357	25·05568	25·77151	26·37425	82
83	28·74245	29·67704	25·13085	25·84241	26·43905	83
84	28·83854	29·76812	25·20427	25·91145	26·50191	84
85	28·93249	29·85689	25·27601	25·98104	26·56289	85
86	29·02436	29·94341	25·34609	26·04416	26·62206	86
87	29·11420	30·02773	25·41458	26·10792	26·67946	87
88	29·20206	30·10991	25·48150	26·17003	26·73516	88
89	29·28798	30·19002	25·54689	26·23052	26·78920	89
90	29·37201	30·26809	25·61081	26·28944	26·84163	90
91	29·45420	30·34420	25·67327	26·34683	26·89251	91
92	29·53460	30·41838	25·73433	26·40274	26·94187	92
93	29·61324	30·49069	25·79402	26·45720	26·98977	93
94	29·69017	30·56117	25·85236	26·51025	27·03625	94
95	29·76543	30·62988	25·90940	26·56194	27·08191	95
96	29·83905	30·69686	25·96517	26·61229	27·12512	96
97	29·91108	30·76216	26·01970	26·66135	27·16759	97
98	29·98156	30·82582	26·07301	26·70916	27·20880	98
99	30·05052	30·88787	26·12515	26·75573	27·24880	99
100	30·11799	30·94837	26·17613	26·80111	27·28761	100

	Value of an Annuity Yielding Interest on Capital at 4 PER CENT., and Replacing Capital when Invested at				
Years	2 %	2½ %	3 %	3½ %	Years
1	·96153	·96153	·96153	·96153	1
2	1·86898	1·87326	1·87754	1·88182	2
3	2·72662	2·73870	2·75080	2·76294	3
4	3·53827	3·56103	3·58388	3·60684	4
5	4·30740	4·34316	4·37916	4·41538	5
6	5·03713	5·08777	5·13881	5·19027	6
7	5·73026	5·79725	5·86488	5·93315	7
8	6·38938	6·47386	6·55925	6·64555	8
9	7·01678	7·11962	7·22367	7·32891	9
10	7·61514	7·73641	7·85975	7·98458	10
11	8·18478	8·32598	8·46902	8·61390	11
12	8·72908	8·88990	9·05288	9·21562	12
13	9·24912	9·42967	9·61265	9·79801	13
14	9·74640	9·94663	10·14957	10·35513	14
15	10·22229	10·44207	10·66478	10·89027	15
16	10·67804	10·91715	11·15936	11·40448	16
17	11·11483	11·37297	11·63433	11·89865	17
18	11·53374	11·81055	12·09063	12·37366	18
19	11·93577	12·23083	12·52915	12·83033	19
20	12·32184	12·63470	12·95073	13·26945	20
21	12·69281	13·02298	13·35617	13·69177	21
22	13·04948	13·39646	13·74620	14·09799	22
23	13·39260	13·75584	14·12152	14·48880	23
24	13·72286	14·10182	14·48280	14·86484	24
25	14·04091	14·43503	14·83066	15·22672	25
26	14·34736	14·75606	15·16569	15·57501	26
27	14·64277	15·06549	15·48846	15·91029	27
28	14·92767	15·36383	15·79948	16·23307	28
29	15·20257	15·65159	16·09926	16·54387	29
30	15·46792	15·92924	16·38827	16·84315	30
31	15·72417	16·19722	16·66696	17·13138	31
32	15·97173	16·45594	16·93577	17·40901	32
33	16·21099	16·70582	17·19509	17·67646	33
34	16·44232	16·94721	17·44532	17·93411	34
35	16·66605	17·18048	17·68681	18·18236	35
36	16·88252	17·40597	17·91993	18·42158	36
37	17·09204	17·62397	18·14499	18·65211	37
38	17·29488	17·83481	18·36232	18·87428	38
39	17·49134	18·03877	18·57222	19·08843	39
40	17·68167	18·23612	18·77498	19·29486	40
41	17·86611	18·42711	18·97086	19·49385	41
42	18·04491	18·61201	19·16014	19·68571	42
43	18·21828	18·79103	19·34307	19·87068	43
44	18·38643	18·96440	19·51987	20·00000	44
45	18·54957	19·13234	19·69078	20·22104	45
46	18·70788	19·29505	19·85603	20·38691	46
47	18·86154	19·45272	20·01580	20·54688	47
48	19·01074	19·60554	20·17032	20·70116	48
49	19·15563	19·79522	20·31978	20·84998	49
50	19·29637	19·89731	20·46434	20·99354 .	50

	Value of an Annuity Yielding Interest on Capital at 4 PER CENT., and Replacing Capital when Invested at				
Years	**2 %**	**2½ %**	**3 %**	**3½ %**	Years
51	19·43311	20·03658	20·60419	21·13201	51
52	19·56599	20·17364	20·73949	21·26535	52
53	19·69515	20·30271	20·87042	21·39449	53
54	19·82072	20·42985	20·99712	21·51884	54
55	19·94281	20·55321	21·11974	21·63883	55
56	20·06156	20·67293	21·23842	21·75460	56
57	20·17707	20·78914	21·35331	21·86631	57
58	20·28946	20·90194	21·47867	21·97411	58
59	20·39882	21·01146	21·57221	22·07814	59
60	20·50526	21·11781	21·67648	22·17854	60
61	20·60887	21·22108	21·77744	22·27544	61
62	20·70975	21·32139	21·87521	22·36896	62
63	20·80798	21·41882	21·96990	22·45923	63
64	20·90364	21·51348	22·06161	22·54635	64
65	20·99683	21·60544	22·15045	22·63045	65
66	21·08760	21·69480	22·23650	22·71163	66
67	21·17605	21·78165	22·31987	22·78999	67
68	21·26224	21·86605	22·40064	22·86563	68
69	21·34624	21·94808	22·47891	22·93866	69
70	21·42812	22·02783	22·55472	23·00916	70
71	21·50794	22·10536	22·62819	23·07722	71
72	21·58576	22·18074	22·69939	23·14293	72
73	21·66164	22·25403	22·76839	23·20638	73
74	21·73565	22·32530	22·83527	23·26763	74
75	21·80783	22·39462	22·90008	23·32677	75
76	21·87824	22·46204	22·96291	23·38388	76
77	21·94693	22·52761	23·02380	23·43902	77
78	22·01394	22·59140	23·08283	23·49226	78
79	22·07933	22·65345	23·14006	23·54367	79
80	22·14314	22·71383	23·19553	23·59331	80
81	22·20542	22·77257	23·24932	23·64125	81
82	22·26620	22·82973	23·30146	23·68755	82
83	22·32555	22·88535	23·35202	23·73225	83
84	22·38348	22·93947	23·40105	23·77542	84
85	22·44003	22·99215	23·44852	23·81711	85
86	22·49526	23·04342	23·49468	23·85737	86
87	22·54918	23·09333	23·53937	23·89626	87
88	22·60185	23·14191	23·58272	23·93381	88
89	22·65329	23·18919	23·62476	23·97008	89
90	22·70353	23·23523	23·66552	24·00510	90
91	22·75260	23·28005	23·70506	24·03893	91
92	22·80055	23·32369	23·74341	24·07160	92
93	22·84739	23·36618	23·78061	24·10316	93
94	22·89315	23·40755	23·81668	24·13364	94
95	22·93787	23·44784	23·85168	24·16307	95
96	22·98157	23·48707	23·88562	24·19151	96
97	23·02427	23·52528	23·91854	24·21897	97
98	23·06601	23·56249	23·95049	24·24549	98
99	23·10680	23·59873	23·98147	24·27112	99
100	23·14668	23·63403	24·01153	24·29586	100

	Value of an Annuity Yielding Interest on Capital at 5 PER CENT., and Replacing Capital when Invested at				
Years	2%	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	Years
1	·95238	·95238	·95238	·95238	1
2	1·83469	1·83882	1·84294	1·84706	2
3	2·65425	2·66570	2·67716	2·68865	3
4	3·41736	3·43858	3·45988	3·48127	4
5	4·12953	4·16239	4·19543	4·22866	5
6	4·79557	4·84145	4·88764	4·93417	6
7	5·41970	5·47959	5·53997	5·60085	7
8	6·00565	6·08024	6·15550	6·23144	8
9	6·55671	6·64642	6·73701	6·82846	9
10	7·07581	7·18088	7·28701	7·39419	10
11	7·56556	7·68604	7·80778	7·93072	11
12	8·02828	8·16412	8·30137	8·43996	12
13	8·46608	8·61710	8·76996	8·92367	13
14	8·88083	9·04678	9·21435	9·38344	14
15	9·27425	9·45478	9·63701	9·82076	15
16	9·64784	9·84262	10·03907	10·23700	16
17	10·00302	10·21161	10·42182	10·63342	17
18	10·34104	10·56300	10·78647	11·01117	18
19	10·66305	10·89792	11·13414	11·37135	19
20	10·97011	11·21740	11·46582	11·71495	20
21	11·26319	11·52242	11·78248	12·04288	21
22	11·54316	11·81382	12·08497	12·35604	22
23	11·81082	12·09243	12·37411	12·65521	23
24	12·06693	12·35898	12·65063	12·94116	24
25	12·31217	12·61417	12·91524	13·21457	25
26	12·54717	12·85864	13·16858	13·47611	26
27	12·77252	13·09297	13·41126	13·72638	27
28	12·98875	13·31772	13·64382	13·96596	28
29	13·19638	13·53340	13·86680	14·19539	29
30	13·39586	13·74048	14·08069	14·41518	30
31	13·58763	13·93942	14·28593	14·62578	31
32	13·77209	14·13211	14·48297	14·82766	32
33	13·94962	14·31447	14·67220	15·02123	33
34	14·12057	14·49134	14·85399	15·20689	34
35	14·28526	14·66156	15·02871	15·38501	35
36	14·44401	14·82546	15·19669	15·55593	36
37	14·59709	14·98332	15·35824	15·72000	37
38	14·74479	15·13544	15·51365	15·87752	38
39	14·88734	15·28207	15·66321	16·02879	39
40	15·02500	15·42347	15·80718	16·17409	40
41	15·15797	15·55988	15·94581	16·31369	41
42	15·28648	15·69150	16·07932	16·44783	42
43	15·41071	15·81856	16·20795	16·57677	43
44	15·53086	15·94124	16·33190	16·70071	44
45	15·64710	16·05974	16·45138	16·81989	45
46	15·75950	16·17423	16·56657	16·93449	46
47	16·86850	16·28487	16·67764	17·04472	47
48	15·97397	16·39183	16·78478	17·15076	48
49	16·07615	16·55328	16·88814	17·25278	49
50	16·17515	16·59532	16·98788	17·35096	50

For explanation see p. 18

	Value of an Annuity Yielding Interest on Capital at 5 PER CENT., and Replacing Capital when Invested at				
Years	2 %	2½ %	3 %	3½ %	Years
51	16·27113	16·69206	17·08414	17·44544	51
52	16·36418	16·78572	17·17706	17·53639	52
53	16·45443	16·87635	17·26677	17·62394	53
54	16·54198	16·96411	17·35340	17·70824	54
55	16·62693	17·04908	17·43707	17·78941	55
56	16·70940	17·13138	17·51789	17·86757	56
57	16·78945	17·21110	17·59599	17·94287	57
58	16·86720	17·28834	17·67144	18·01538	58
59	16·94271	17·36320	17·74436	18·08526	59
60	17·01607	17·43576	17·81485	18·15257	60
61	17·08736	17·50610	17·88298	18·21743	61
62	17·15667	17·57430	17·94886	18·27993	62
63	17·22401	17·64045	18·01256	18·34017	63
64	17·28951	17·70460	18·07416	18·39822	64
65	17·35320	17·76683	18·13374	18·45418	65
66	17·41516	17·82722	18·19138	18·50813	66
67	17·47544	17·88583	18·24713	18·56013	67
68	17·53410	17·94269	18·30108	18·61028	68
69	17·59119	17·99789	18·35328	18·65862	69
70	17·64675	18·05148	18·40379	18·70524	70
71	17·70085	18·10351	18·45268	18·75020	71
72	17·75353	18·15404	18·50000	18·79355	72
73	17·80483	18·20311	18·54581	18·83537	73
74	17·85480	18·25077	18·59015	18·87570	74
75	17·90347	18·29706	18·63309	18·91461	75
76	17·95090	18·34204	18·67466	18·95213	76
77	17·99711	18·38574	18·71492	18·98834	77
78	18·04215	18·42821	18·75390	19·02326	78
79	18·08605	18·46948	18·79166	19·05696	79
80	18·12885	18·50959	18·82823	19·08947	80
81	18·17057	18·54858	18·86365	19·12084	81
82	18·21125	18·58648	18·89796	19·15112	82
83	18·25093	18·62333	18·93120	19·18033	83
84	18·28961	18·65916	18·96341	19·20851	84
85	18·32738	18·69400	18·99461	19·23572	85
86	18·36419	18·72788	19·02485	19·26197	86
87	18·40011	18·76083	19·05414	19·28731	87
88	18·43516	18·79288	19·08254	19·31177	88
89	18·46937	18·82405	19·11005	19·33537	89
90	18·50275	18·85438	19·13671	19·35816	90
91	18·53533	18·88388	19·16257	19·38014	91
92	18·56714	18·91258	19·18762	19·40138	92
93	18·59819	18·94051	19·21190	19·42187	93
94	18·62850	18·96768	19·23544	19·44166	94
95	18·65810	18·99413	19·25826	19·46076	95
96	18·68700	19·01986	19·28038	19·47919	96
97	18·71523	19·04491	19·30183	19·49700	97
98	18·74280	19·06929	19·32262	19·51418	98
99	18·76972	19·09301	19·34279	19·53078	99
100	18·79602	19·11612	19·36233	19·54680	100

Years	2 %	2½ %	3 %	3½ %	4 %	Years
	Value of an Annuity Yielding Interest on Capital at 6 PER CENT., and Replacing Capital when Invested at					
1	·94340	·94340	·94340	·94340	·94340	1
2	1·80164	1·80562	1·80959	1·81357	1·81753	2
3	2·58562	2·59648	2·60736	2·61825	2·62916	3
4	3·30443	3·32427	3·34418	3·36416	3·38421	4
5	3·96577	3·99605	4·02649	4·05711	4·08786	5
6	4·57611	4·61787	4·65988	4·70216	4·74469	6
7	5·14107	5·19494	5·24918	5·30380	5·35877	7
8	5·66543	5·73174	5·79858	5·86589	5·93373	8
9	6·15328	6·23220	6·31178	6·39198	6·47279	9
10	6·60825	6·69976	6·79205	6·88511	6·97881	10
11	7·03344	7·13745	7·24234	7·34797	7·45440	11
12	7·43163	7·54791	7·66507	7·78307	7·90189	12
13	7·80530	7·93349	8·06257	8·19256	8·32335	13
14	8·15647	8·29628	8·43697	8·57846	8·72075	14
15	8·48716	8·63811	8·78990	8·94254	9·09579	15
16	8·79894	8·96065	9·12317	9·28634	9·45001	16
17	9·09339	9·26544	9·43814	9·61141	9·78483	17
18	9·37189	9·55384	9·73624	9·91896	10·10172	18
19	9·63558	9·82704	10·01863	10·21033	10·40161	19
20	9·88562	10·08603	10·28637	10·48647	10·68582	20
21	10·12299	10·33197	10·54052	10·74841	10·95530	21
22	10·34865	10·56569	10·78202	10·99723	11·21089	22
23	10·56323	10·78795	11·01152	11·23356	11·45357	23
24	10·76762	10·99953	11·23002	11·45830	11·68402	24
25	10·96239	11·20122	11·43798	11·67215	11·90306	25
26	11·14840	11·39367	11·63630	11·87578	12·11138	26
27	11·32593	11·57716	11·82536	12·06971	12·30936	27
28	11·49557	11·75254	12·00581	12·25445	12·49797	28
29	11·65786	11·92023	12·17805	12·43085	12·67748	29
30	11·81335	12·08065	12·34278	12·59906	12·84852	30
31	11·96229	12·23406	12·50016	12·75966	13·01152	31
32	12·10493	12·38114	12·65070	12·91289	13·16673	32
33	12·24185	12·52207	12·79492	13·05960	13·31487	33
34	12·37333	12·65711	12·93293	13·19958	13·45623	34
35	12·49969	12·78691	13·06523	13·33369	13·59120	35
36	12·62100	12·91139	13·19192	13·46185	13·71987	36
37	12·73772	13·03084	13·31345	13·58456	13·84275	37
38	12·85000	13·14579	13·43021	13·70201	13·96024	38
39	12·95824	13·25627	13·54206	13·81444	14·07242	39
40	13·06233	13·36255	13·64964	13·92234	14·17977	40
45	13·52997	13·83757	14·12729	14·39823	14·64944	45
50	13·92312	14·23325	14·52095	14·78546	15·02630	50
55	14·25659	14·56579	14·84803	15·10277	15·33013	55
60	14·54165	14·84715	15·12104	15·36358	15·57584	60
65	14·78721	15·08637	15·35014	15·57924	15·77536	65
70	15·03895	15·29122	15·54316	15·75771	15·93752	70
75	15·18488	15·46695	15·70648	15·90609	16·06968	75
80	15·34660	15·61865	15·84485	16·02949	16·17756	80
90	15·61378	15·86345	16·06271	16·21850	16·33773	90
100	15·82203	16·04827	16·22139	16·35082	16·44520	100

For explanation see p. 18.

	Value of an Annuity Yielding Interest on Capital at 7 PER CENT., and Replacing Capital when Invested at					
Year	**2 %**	**2½ %**	**3 %**	**3½ %**	**4 %**	Years
1	·93458	·93458	·93458	·93458	·93458	1
2	1·76976	1·77359	1·77743	1·78126	1·78509	2
3	2·52045	2·53077	2·54110	2·55145	2·56181	3
4	3·19873	3·21732	3·23596	3·25467	3·27343	4
5	3·81449	3·84250	3·87064	3·89892	3·92731	5
6	4·37587	4·41404	4·45240	4·49099	4·52977	6
7	4·88969	4·93839	4·98738	5·03667	5·08621	7
8	5·36167	5·42102	5·48077	5·54087	5·60136	8
9	5·79660	5·86658	5·93704	6·00795	6·07929	9
10	6·19863	6·27908	6·36007	6·44160	6·52354	10
11	6·57125	6·66196	6·75324	6·84500	6·93727	11
12	6·91754	7·01818	7·11936	7·22105	7·32322	12
13	7·24019	7·35035	7·46102	7·57220	7·68380	13
14	7·54136	7·66072	7·78053	7·90070	8·02124	14
15	7·82320	7·95127	8·07970	8·20850	8·33743	15
16	8·08734	8·22376	8·36044	8·49726	8·63409	16
17	8·33542	8·47975	8·62418	8·76862	8·91273	17
18	8·56883	8·72068	8·87241	9·02389	9·17490	18
19	8·78874	8·94775	9·10631	9·26441	9·42161	19
20	8·99628	9·16196	9·32697	9·49118	9·65419	20
21	9.19244	9·36444	9·53543	9·70525	9·87362	21
22	9·37814	9·55603	9·73264	9·90766	10·08075	22
23	9·55402	9·73748	9·91926	10·09907	10·27654	23
24	9·72091	9·90953	10·09622	10·28035	10·46167	24
25	9·87937	10·07293	10·26399	10·45216	10·63694	25
26	10·03019	10·22830	10·42340	10·61515	10·80299	26
27	10·17366	10·37592	10·57485	10·76983	10·96023	27
28	10·31034	10·51657	10·71892	10·91667	11·10951	28
29	10·44070	10·65065	10·85600	11·05644	11·25113	29
30	10·56524	10·77853	10·98672	11·18931	11·38563	30
31	10·68422	10·90049	11·11123	11·31580	11·51344	31
32	10·79785	11·01710	11·23002	11·43615	11·63481	32
33	10·90667	11·12855	11·34353	11·55108	11·75033	33
34	11·01091	11·23507	11·45187	11·66045	11·86029	34
35	11·11086	11·33723	11·55548	11·76498	11·96501	35
36	11·20662	11·43498	11·65447	11·86465	12·06462	36
37	11·29854	11·52857	11·74922	11·95986	12·15953	37
38	11·38680	11·61845	11·84006	12·05081	12·25010	38
39	11·47171	11·70467	11·92691	12·13769	12·33639	39
40	11·55321	11·78745	12·01028	12·22091	12·41881	40
45	11·91753	12·15554	12·37854	12·58606	12·77759	45
50	12·22150	12·45982	12.67974	12·88095	13·06336	50
55	12·47770	12·71391	12·92842	13·12112	13·29239	55
60	12·69551	12·92775	13·13491	13·31753	13·47673	60
65	12·88228	13·10874	13·30743	13·47927	13·62583	65
70	13·04325	13·26313	13·45225	13·61267	13·74665	70
75	13·18305	13·39513	13·57441	13·72326	13·84485	75
80	13·30477	13·50877	13·67765	13·81502	13·92486	80
90	13·50512	13·69150	13·83968	13·95518	14·04337	90
100	13·66064	13·82896	13·95732	14·05304	14·12270	100

	Value of an Annuity Yielding Interest on Capital at $7\frac{1}{2}$ PER CENT., and Replacing Capital when Invested at					
Years	**2 %**	**$2\frac{1}{2}$ %**	**3 %**	**$3\frac{1}{2}$ %**	**4 %**	Years
I	·93023	·93023	·93023	·93023	·93023	I
2	1·75424	1·75800	1·76177	1·76554	1·76930	2
3	2·48908	2·49914	2·50922	2·51931	2·52941	3
4	3·14838	3·16638	3·18444	3·20255	3·22072	4
5	3·74310	3·77007	3·79716	3·82437	3·85168	5
6	4·28218	4·31872	4·35544	4·39236	4·42944	6
7	4·77300	4·81939	4·86604	4·91294	4·96007	7
8	5·22169	5·27796	5·33459	5·39150	5·44876	8
9	5·63333	5·69940	5·76588	5·83274	5·89995	9
10	6·01229	6·08794	6·16405	6·24060	6·31748	10
11	6·36221	6·44720	6·53266	6·61848	6·70471	11
12	6·68628	6·78026	6·87465	6·96942	7·06454	12
13	6·98724	7·08979	7·19269	7·29597	7·39952	13
14	7·26734	7·37811	7·48918	7·60046	7·71194	14
15	7·52870	7·64725	7·76597	7·88488	8·00378	15
16	7·77303	7·89896	8·02497	8·15096	8·27678	16
17	8·00192	8·13484	8·26768	8·40033	8·53250	17
18	8·21679	8·35631	8·49553	8·63431	8·77247	18
19	8·41876	8·56458	8·70974	8·85426	8·99774	19
20	8·60904	8·76063	8·91139	9·06117	9·20963	20
21	8·78850	8·94558	9·10150	9·25609	9·40911	21
22	8·95809	9·12026	9·28100	9·44002	9·59702	22
23	9·11843	9·28540	9·45054	9·61363	9·77431	23
24	9·27033	9·44171	9·61104	9·77775	9·94164	24
25	9·41433	9·68991	9·76296	9·93305	10·09979	25
26	9·55119	9·73066	9·90707	10·08014	10·24937	26
27	9·68120	9·86417	10·04379	10·21952	10·39080	27
28	9·80488	9·99121	10·17366	10·35165	10·52488	28
29	9·92270	10·11214	10·29707	10·47724	10·65190	29
30	10·03512	10·22735	10·41461	10·59648	10·77238	30
31	10·14240	10·33709	10·52643	10·70985	10·88672	31
32	10·24475	10·44190	10·63298	10·81759	10·99519	32
33	10·34265	10·54196	10·73468	10·92037	11·09829	33
34	10·43634	10·63751	10·83165	11·01807	11·19633	34
35	10·52609	10·72904	10·92431	11·11136	11·28961	35
36	10·61199	10·81654	11·01273	11·20022	11·37825	36
37	10·69439	10·90025	11·09730	11·28503	11·46263	37
38	10·77342	10·98056	11·17831	11·36596	11·54308	38
39	10·84940	11·05754	11·25568	11·44322	11·61967	39
40	10·92228	11·13139	11·32990	11·51715	11·69276	40
45	11·24733	11·45909	11·65705	11·84091	12·01028	45
50	11·51769	11·72910	11·92378	12·10156	12·26242	50
55	11·74495	11·95400	12.14344	12·31330	12·46401	55
60	11·93773	12·14285	12·32544	12·48611	12·62594	60
65	12·10273	12·30239	12·47723	12·62818	12·75673	65
70	12·24470	12·43828	12·60446	12·74519	12·86256	70
75	12·36782	12·55430	12·71165	12·84208	12·94850	75
80	12·47489	12·65406	12·80213	12·92240	13·01846	80
90	12·65086	12·81427	12·94398	13·04495	13·12198	90
100	12·78723	12·93460	13·04683	13·13042	13·19122	100

For explanation see p. 18.

	Value of an Annuity Yielding Interest on Capital at 8 PER CENT., and Replacing Capital when invested at					
Years	**2 %**	**2½ %**	**3 %**	**3½ %**	**4 %**	Years
1	·92593	·92593	·92593	·92593	·92593	1
2	1·73898	1·74269	1·74639	1·75009	1·75378	2
3	2·45848	2·46830	2·47813	2·48797	2·49782	3
4	3·09958	3·11703	3·13453	3·15208	3·16967	4
5	3·67434	3·70032	3·72641	3·75261	3·77890	5
6	4·19242	4·22744	4·26261	4·29797	4·33347	6
7	4·66174	4·70599	4·75046	4·79515	4·84004	7
8	5·08883	5·14226	5·19599	5·24998	5·30425	8
9	5·47900	5·54149	5·60431	5·66745	5·73089	9
10	5·83683	5·90811	5·97975	6·05177	6·12404	10
11	6·16606	6·24586	6·32603	6·40648	6·48723	11
12	6·46998	6·55794	6·64620	6·73473	6·82352	12
13	6·75137	6·84706	6·94300	7·03918	7·13552	13
14	7·01252	7·11561	7·21886	7·32220	7·42561	14
15	7·25558	7·36563	7·47569	7·58581	7·79580	15
16	7·48223	7·59884	7·71539	7·83177	7·94786	16
17	7·69408	7·81690	7·93947	8·06172	8·18337	17
18	7·89253	8·02118	8·14936	8·27698	8·40386	18
19	8·07872	8·21288	8·34627	8·47889	8·61037	19
20	8·25375	8·39299	8·53126	8·66844	8·80421	20
21	8·41857	8·56260	8·70534	8·84666	8·98634	21
22	8·57405	8·72250	8·86941	9·01453	9·15759	22
23	8·72083	8·87343	9·02413	9·17271	9·31888	23
24	8·85967	9·01607	9·17036	9·32201	9·47086	24
25	8·99111	9·15114	9·30856	9·46307	9·61428	25
26	9·11585	9·27919	9·43948	9·59647	9·74972	26
27	9·23421	9·40053	9·56352	9·72271	9·87762	27
28	9·34667	9·51583	9·68120	9·84223	9·99870	28
29	9·45367	9·62547	9·79288	9·95570	10·11327	29
30	9·55566	9·72980	9·89913	10·06330	10·22181	30
31	9·65288	9·82907	10·00010	10·16549	10·32471	31
32	9·74554	9·92379	10·09622	10·26252	10·42220	32
33	9·83410	10·01412	10·18786	10·35497	10·51480	33
34	9·91877	10·10030	10·27517	10·44277	10·60277	34
35	9·99980	10·18278	10·35851	10·52654	10·68639	35
36	10·07729	10·26157	10·43798	10·60625	10·76577	36
37	10·15156	10·33688	10·51392	10·68228	10·84128	37
38	10·22275	10·40908	10·58660	10·75477	10·91322	38
39	10·29114	10·47823	10·65598	10·82392	10·98165	39
40	10·35668	10·54452	10·72248	10·89004	11·04692	40
45	10·64849	10·83811	11·01504	11·17905	11·32990	45
50	10·89052	11·07935	11·25290	11·41110	11·55402	50
55	11·09348	11·27981	11·44833	11·59918	11·73282	55
60	11·26532	11·44780	11·60995	11·75240	11·87620	60
65	11·41214	11·58950	11·74453	11·87818	11·99185	65
70	11·53828	11·71001	11·85719	11·98164	12·08532	70
75	11·64755	11·81279	11·95200	12·06724	12·16116	75
80	11·74246	11·90108	12·03196	12·13813	12·22285	80
90	11·89825	12·04268	12·15717	12·24620	12·31406	90
100	12·01880	12·14890	12·24785	12·32149	12·37501	100

	Value of an Annuity Yielding Interest on Capital at 9 PER CENT., and Replacing Capital when Invested at					
Years	**2 %**	**2 ½%**	**3 %**	**3½ %**	**4 %**	Years
1	·91743	·91743	·91743	·91743	·91743	1
2	1·70926	1·71284	1·71641	1·71999	1·72356	2
3	2·39949	2·40884	2·41820	2·42757	2·43695	3
4	3·00640	3·02281	3·03926	3·05576	3·07229	4
5	3·54411	3·56828	3·59253	3·61689	3·64130	5
6	4·02372	4·05597	4·08834	4·12086	4·15348	6
7	4·45411	4·49448	4·53502	4·57574	4·61659	7
8	4·84240	4·89076	4·93935	4·98810	5·03707	8
9	5·19440	5·25053	5·30690	5·36348	5·42026	9
10	5·51493	5·57852	5·64235	5·70643	5·77064	10
11	5·80794	5·87869	5·94965	6·02076	6·09203	11
12	6·07681	6·15434	6·23201	6·30979	6·38765	12
13	6·32439	6·40828	6·49224	6·57626	6·66027	13
14	6·55299	6·64293	6·73283	6·82263	6·91233	14
15	6·76476	6·86031	6·95570	7·05094	7·14587	15
16	6·96136	7·06220	7·16276	7·26296	7·36269	16
17	7·14439	7·25016	7·35548	7·46029	7·56435	17
18	7·31518	7·42556	7·53529	7·64427	7·75236	18
19	7·47485	7·58956	7·70333	7·81616	7·92776	19
20	7·62445	7·74311	7·86065	7·97696	8·09179	20
21	7·76488	7·88724	8·00820	8·12764	8·24538	21
22	7·89696	8·02272	8·14684	8·26911	8·38933	22
23	8·02130	8·15023	8·27719	8·40202	8·52450	23
24	8·13862	8·27041	8·40004	8·52711	8·65149	24
25	8·24940	8·38392	8·51586	8·64499	8·77101	25
26	8·35429	8·49127	8·62530	8·75618	8·88360	26
27	8·45359	8·59276	8·72875	8·86116	8·98965	27
28	8·54774	8·68900	8·82667	8·96033	9·08983	28
29	8·63715	8·78033	8·91941	9·05428	9·18442	29
30	8·72220	8·86706	9·00747	9·14319	9·27386	30
31	8·80313	8·94943	9·09099	9·22748	9·35848	31
32	8·88013	9·02788	9·17036	9·30735	9·43850	32
33	8·95359	9·10258	9·24590	9·38333	9·51439	33
34	9·02372	9·17372	9·31775	9·45537	9·58635	34
35	9·09074	9·24172	9·38623	9·52399	9·65465	35
36	9·15474	9·30657	9·45144	9·58917	9·71940	36
37	9·21600	9·36847	9·51366	9·65134	9·78091	37
38	9·27463	9·42774	9·57313	9·71044	9·83942	38
39	9·33088	9·48443	9·62983	9·76677	9·89501	39
40	9·38474	9·53871	9·68410	9·82058	9·94797	40
45	9·62371	9·77833	9·92211	10·05500	10·17687	45
50	9·82096	9·97427	10·11470	10·24233	10·35733	50
55	9·98572	10·13644	10·27232	10·39361	10·50078	55
60	10·12474	10·27190	10·40226	10·51646	10·61549	60
65	10·24317	10·38583	10·51016	10·61706	10·70778	65
70	10·34468	10·48251	10·60029	10·69965	10·78225	70
75	10·43242	10·56479	10·67600	10·76786	10·84258	75
80	10·50851	10·63536	10·73975	10·82427	10·89159	80
90	10·63309	10·74830	10·83940	10·91012	10·96395	90
100	10·72927	10·83283	10·91143	10·96984	11·01225	100

For explanation see p. 18.

	Value of an Annuity Yielding Interest on Capital at 10 PER CENT., and Replacing Capital when Invested at					
Years	2 %	2½ %	3 %	3½ %	4 %	Years
1	·90909	·90909	·90909	·90909	·90909	1
2	1·68053	1·68399	1·68745	1·69090	1·69435	2
3	2·34326	2·35218	2·36111	2·37004	2·37898	3
4	2·91865	2·93412	2·94962	2·96515	2·98071	4
5	3·42281	3·44534	3·46795	3·49063	3·51337	5
6	3·86808	3·89788	3·92776	3·95776	3·98785	6
7	4·26417	4·30117	4·33828	4·37533	4·41287	7
8	4·61875	4·66272	4·70686	4·75111	4·79552	8
9	4·93791	4·98860	5·03946	5·09046	5·14157	9
10	5·22668	5·28377	5·34100	5·39837	5·45580	10
11	5·48914	5·55229	5·61555	5·67885	5·74221	11
12	5·72869	5·79754	5·86641	5·93528	6·00413	12
13	5·94820	6·02236	6·09645	6·17048	6·24438	13
14	6·14999	6·22913	6·30811	6·38688	6·46542	14
15	6·33613	6·41989	6·50335	6·58653	6·66929	15
16	6·50830	6·59635	6·68400	6·77117	6·85777	16
17	6·66800	6·76005	6·85152	6·94237	7·03240	17
18	6·81654	6·91228	7·00727	7·10142	7·19461	18
19	6·95497	7·05418	7·15236	7·24953	7·34543	19
20	7·08431	7·18664	7·28778	7·38765	7·48604	20
21	7·20539	7·31064	7·41444	7·51671	7·61731	21
22	7·31898	7·42688	7·53313	7·63755	7·74000	22
23	7·42567	7·53602	7·64444	7·75080	7·85491	23
24	7·52610	7·63866	7·74911	7·85713	7·96261	24
25	7·62073	7·73539	7·84757	7·95710	8·06374	25
26	7·71016	7·82669	7·94042	8·05121	8·15880	26
27	7·79466	7·91283	8·02800	8·13988	8·24817	27
28	7·87464	7·99437	8·11076	8·22348	8·33243	28
29	7·95045	8·07161	8·18900	8·30254	8·41184	29
30	8·02246	8·14485	8·26317	8·37724	8·48680	30
31	8·09088	8·21429	8·33340	8·44794	8·55761	31
32	8·15587	8·28034	8·40004	8·51484	8·62448	32
33	8·21781	8·34314	8·46339	8·57839	8·68780	33
34	8·27684	8·40287	8·52355	8·63856	8·74776	34
35	8·33320	8·45988	8·58082	8·69580	8·80460	35
36	8·38694	8·51419	8·63528	8·75013	8·85842	36
37	8·43832	8·56597	8·68719	8·80181	8·90948	37
38	8·48745	8·61549	8·73675	8·85097	8·95801	38
39	8·53454	8·66281	8·78395	8·89775	9·00406	39
40	8·57957	8·70807	8·82909	8·94238	9·04787	40
45	8·77886	8·90734	9·02649	9·13634	9·23685	45
50	8·94270	9·06964	9·18561	9·29074	9·38526	50
55	9·07909	9·20353	9·31541	9·41504	9·50290	55
60	9·19388	9·31506	9·42214	9·51574	9·59674	60
65	9·29144	9·40867	9·51059	9·59803	9·67211	65
70	9·37488	9·48794	9·58433	9·66548	9·73283	70
75	9·44688	9·55530	9·64618	9·72110	9·78196	75
80	9·50923	9·61298	9·69819	9·76706	9·82183	80
90	9·61113	9·70516	9·77938	9·83691	9·88064	90
100	9·68964	9·77402	9·83797	9·88543	9·91985	100

NOMINAL AND EFFECTIVE RATES OF INTEREST

Nominal Rate (Annual)	Effective Annual Rate when Interest is Convertible			Nominal Rate (Annual)
	Half-yearly	Quarterly	Monthly	
·01	·010025	·010038	·010046	·01
·0125	·012539	·012559	·012572	·0125
·015	·015056	·015085	·015104	·015
·0175	·017577	·017615	·017641	·0175
·02	·020100	·020151	·020184	·02
·0225	·022627	·022691	·022733	·0225
·025	·025156	·025235	·025288	·025
·0275	·027689	·027785	·027849	·0275
·03	·030225	·030339	·030416	·03
·0325	·032764	·032898	·032989	·0325
·035	·035306	·035462	·035567	·035
·0375	·037852	·038031	·038151	·0375
·04	·040400	·040604	·040742	·04
·045	·045506	·045765	·045940	·045
·05	·050625	·050945	·051162	·05
·06	·060900	·061364	·061678	·06
·07	·071225	·071859	·072290	·07
·08	·081600	·082432	·083000	·08
·09	·092025	·093083	·093807	·09
·10	·102500	·103813	·104713	·10

Effective Rate (Annual)	Nominal Annual Rate when Interest is Convertible			Effective Rate (Annual)
	Half-yearly	Quarterly	Monthly	
·01	·009975	·009963	·009954	·01
·0125	·012461	·012442	·012429	·0125
·015	·014944	·014916	·014898	·015
·0175	·017424	·017386	·017361	·0175
·02	·019901	·019852	·019819	·02
·0225	·022375	·022313	·022271	·0225
·025	·024846	·024769	·024718	·025
·0275	·027313	·027221	·027159	·0275
·03	·029778	·029668	·029595	·03
·0325	·032240	·032111	·032026	·0325
·035	·034699	·034550	·034451	·035
·0375	·037155	·036984	·036871	·0375
·04	·039608	·039414	·039285	·04
·045	·044504	·044260	·044098	·045
·05	·049390	·049089	·048889	·05
·06	·059126	·058695	·058411	·06
·07	·068816	·068234	·067850	·07
·08	·078461	·077706	·077208	·08
·09	·088061	·087113	·086488	·09
·10	·097618	·096455	·095690	·10

Constant Factors for Converting Values and Amounts of Yearly Annuities into those of Annuities for One Year Payable HALF-YEARLY, QUARTERLY, AND MONTHLY

Yearly Rates	Half-yearly Factors	Quarterly Factors	Monthly Factors	Yearly Rates
·01	1·00249	1·00377	1·00460	·01
·0125	1·00312	1·00469	1·00572	·0125
·015	1·00374	1·00563	1·00685	·015
·0175	1·00436	1·00656	1·00799	·0175
·02	1·00497	1·00747	1·00914	·02
·0225	1·00559	1·00841	1·01027	·0225
·025	1·00621	1·00933	1·01142	·025
·0275	1·00683	1·01025	1·01254	·0275
·03	1·00744	1·01118	1·01368	·03
·0325	1·00806	1·01211	1·01482	·0325
·035	1·00867	1·01303	1·01594	·035
·0375	1·00929	1·01395	1·01707	·0375
·04	1·00990	1·01488	1·01820	·04
·045	1·01113	1·01672	1·02046	·045
·05	1·01235	1·01856	1·02271	·05
·06	1·01478	1·02223	1·02721	·06
·07	1·01720	1·02588	1·03169	·07
·08	1·01961	1·02952	1·03616	·08
·09	1·02201	1·03314	1·04061	·09
·10	1·02440	1·03676	1·04504	·10

Value of Annuity for Twenty-five Years at 4 PER CENT.

Annuity Payable	Interest Convertible			
	Yearly	Half-yearly	Quarterly	Monthly
Yearly . . .	15·62208	15·55624	15·52282	15·50035
Half-yearly . .	15·77677	15·71180	15·67883	15·65665
Quarterly . .	15·85449	15·78998	15·75722	15·73520
Monthly . .	15·90645	15·84223	15·80963	15·78771

The Present Value of 1 due a Year hence (v), and the Discount on 1 for One Year (d) corresponding to Various Rates of Interest (i)

i	$v=\dfrac{1}{1+i}$	$d=1-v$	i	$v=\dfrac{1}{1+i}$	$d=1-v$
·01	·990099010	·009900990	·03	·970873786	·029126214
·0125	·987654321	·012345679	·035	·966183575	·033816425
·015	·985221675	·014778325	·04	·961538462	·038461538
·0175	·982800983	·017199017	·045	·956937799	·043062201
·02	·980392157	·019607843	·05	·952380952	·047619048
·0225	·977995110	·022004890	·06	·943396226	·056603774
·025	·975609756	·024390244	·08	·925925926	·074074074
·0275	·973236010	·026763990	·10	·909090909	·090909091

For explanation see pp. 19, 20

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The Number of Years in which an Amount is doubled by Accumulation at SIMPLE AND COMPOUND INTEREST

Rate per Cent.	At Simple Interest	At Compound Interest	Rate per Cent.
I	100·00	69·66	I
1¼	80·00	55·80	1¼
1½	66·67	46·56	1½
1¾	57·14	39·95	1¾
2	50·00	35·00	2
2¼	44·44	31·15	2¼
2½	40·00	28·07	2½
2¾	36·36	25·55	2¾
3	33·33	23·45	3
3¼	30·77	21·67	3¼
3½	28·57	20·15	3½
3¾	26·67	18·83	3¾
4	25·00	17·67	4
4½	22·22	15·75	4½
5	20·00	14·21	5
6	16·67	11·90	6
7	14·29	10·24	7
8	12·50	9·01	8
9	11·11	8·04	9
10	10·00	7·27	10

DECIMALS OF ONE YEAR

Weeks	Decimal of One Year	Weeks	Decimal of One Year	Months	Decimal of One Year
1	·019231	27	·519231	1	·083333
2	·038462	28	·538462	2	·166667
3	·057692	29	·557692	3	·250000
4	·076923	30	·576923	4	·333333
5	·096154	31	·596154	5	·416667
6	·115385	32	·615385	6	·500000
7	·134615	33	·634615	7	·583333
8	·153846	34	·653846	8	·666667
9	·173077	35	·673077	9	·750000
10	·192308	36	·692308	10	·833333
11	·211538	37	·711538	11	·916667
12	·230769	38	·730769	12	1·000000
13	·250000	39	·750000		
14	·269231	40	·769231	Days	Decimals of One Year
15	·288462	41	·788462	30	·082192
16	·307692	42	·807692	60	·164384
17	·326923	43	·826923	90	·246575
18	·346154	44	·846154	120	·328767
19	·365385	45	·865385	150	·410959
20	·384615	46	·884615	180	·493151
21	·403846	47	·903846	210	·575342
22	·423077	48	·923077	240	·657534
23	·442308	49	·942308	270	·739726
24	·461538	50	·961538	300	·821918
25	·480769	51	·980709	330	·904110
26	·500000	52	1·000000	365	1·000000

DECIMALS OF £1

| THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £ |

Pence	0s.	1s.	2s.	3s.	4s.	Pence
0	·00000	·05000	·10000	·15000	·20000	0
0¼	·00104	·05104	·10104	·15104	·20104	0¼
0½	·00208	·05208	·10208	·15208	·20208	0½
0¾	·00313	·05313	·10313	·15313	·20313	0¾
1	·00417	·05417	·10417	·15417	·20417	1
1¼	·00521	·05521	·10521	·15521	·20521	1¼
1½	·00625	·05625	·10625	·15625	·20625	1½
1¾	·00729	·05729	·10729	·15729	·20729	1¾
2	·00833	·05833	·10833	·15833	·20833	2
2¼	·00938	·05938	·10938	·15938	·20938	2¼
2½	·01042	·06042	·11042	·16042	·21042	2½
2¾	·01146	·06146	·11146	·16146	·21146	2¾
3	·01250	·06250	·11250	·16250	·21250	3
3¼	·01354	·06354	·11354	·16354	·21354	3¼
3½	·01458	·06458	·11458	·16458	·21458	3½
3¾	·01563	·06563	·11563	·16563	·21563	3¾
4	·01667	·06667	·11667	·16667	·21667	4
4¼	·01771	·06771	·11771	·16771	·21771	4¼
4½	·01875	·06875	·11875	·16875	·21875	4½
4¾	·01979	·06979	·11979	·16979	·21979	4¾
5	·02083	·07083	·12083	·17083	·22083	5
5¼	·02188	·07188	·12188	·17188	·22188	5¼
5½	·02292	·07292	·12292	·17292	·22292	5½
5¾	·02396	·07396	·12396	·17396	·22396	5¾
6	·02500	·07500	·12500	·17500	·22500	6
6¼	·02604	·07604	·12604	·17604	·22604	6¼
6½	·02708	·07708	·12708	·17708	·22708	6½
6¾	·02813	·07813	·12813	·17813	·22813	6¾
7	·02917	·07917	·12917	·17917	·22917	7
7¼	·03021	·08021	·13021	·18021	·23021	7¼
7½	·03125	·08125	·13125	·18125	·23125	7½
7¾	·03229	·08229	·13229	·18229	·23229	7¾
8	·03333	·08333	·13333	·18333	·23333	8
8¼	·03438	·08438	·13438	·18438	·23438	8¼
8½	·03542	·08542	·13542	·18542	·23542	8½
8¾	·03646	·08646	·13646	·18646	·23646	8¾
9	·03750	·08750	·13750	·18750	·23750	9
9¼	·03854	·08854	·13854	·18854	·23854	9¼
9½	·03958	·08958	·13958	·18958	·23958	9½
9¾	·04063	·09063	·14063	·19063	·24063	9¾
10	·04167	·09167	·14167	·19167	·24167	10
10¼	·04271	·09271	·14271	.19271	·24271	10¼
10½	·04375	·09375	·14375	·19375	·24375	10½
10¾	·04479	·09479	·14479	·19479	·24479	10¾
11	·04583	·09583	·14583	·19583	·24583	11
11¼	·04688	·09688	·14688	·19688	·24688	11¼
11½	·04792	·09792	·14792	·19792	·24792	11½
11¾	·04896	·09896	·14896	·19896	·24896	11¾

For explanation see pp. 21–23

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Pence	**5**s.	**6**s.	**7**s.	**8**s.	**9**s.	Pence

THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £

Pence	**5**s.	**6**s.	**7**s.	**8**s.	**9**s.	Pence
0	·25000	·30000	·35000	·40000	·45000	0
0¼	·25104	·30104	·35104	·40104	·45104	0¼
0½	·25208	·30208	·35208	·40208	·45208	0½
0¾	·25313	·30313	·35313	·40313	·45313	0¾
1	·25417	·30417	·35417	·40417	·45417	1
1¼	·25521	·30521	·35521	·40521	·45521	1¼
1½	·25625	·30625	·35625	·40625	·45625	1½
1¾	·25729	·30729	·35729	·40729	·45729	1¾
2	·25833	·30833	·35833	·40833	·45833	2
2¼	·25938	·30938	·35938	·40938	·45938	2¼
2½	·26042	·31042	·36042	·41042	·46042	2½
2¾	·26146	·31146	·36146	·41146	·46146	2¾
3	·26250	·31250	·36250	·41250	·46250	3
3¼	·26354	·31354	·36354	·41354	·46354	3¼
3½	·26458	·31458	·36458	·41458	·46458	3½
3¾	·26563	·31563	·36563	·41563	·46563	3¾
4	·26667	·31667	·36667	·41667	·46667	4
4¼	·26771	·31771	·36771	·41771	·46771	4¼
4½	·26875	·31875	·36875	·41875	·46875	4½
4¾	·26979	·31979	·36979	·41979	·46979	4¾
5	·27083	·32083	·37083	·42083	·47083	5
5¼	·27188	·32188	·37188	·42188	·47188	5¼
5½	·27292	·32292	·37292	·42292	·47292	5½
5¾	·27396	·32396	·37396	·42396	·47396	5¾
6	·27500	·32500	·37500	·42500	·47500	6
6¼	·27604	·32604	·37604	·42604	·47604	6¼
6½	·27708	·32708	·37708	·42708	·47708	6½
6¾	·27813	·32813	·37813	·42813	·47813	6¾
7	·27917	·32917	·37917	·42917	·47917	7
7¼	·28021	·33021	·38021	·43021	·48021	7¼
7½	·28125	·33125	·38125	·43125	·48125	7½
7¾	·28229	·33229	·38229	·43229	·48229	7¾
8	·28333	·33333	·38333	·43333	·48333	8
8¼	·28438	·33438	·38438	·43438	·48438	8¼
8½	·28542	·33542	·38542	·43542	·48542	8½
8¾	·28646	·33646	·38646	·43646	·48646	8¾
9	·28750	·33750	·38750	·43750	·48750	9
9¼	·28854	·33854	·38854	·43854	·48854	9¼
9½	·28958	·33958	·38958	·43958	·48958	9½
9¾	·29063	·34063	·39063	·44063	·49063	9¾
10	·29167	·34167	·39167	·44167	·49167	10
10¼	·29271	·34271	·39271	·44271	·49271	10¼
10½	·29375	·34375	·39375	·44375	·49375	10½
10¾	·29479	·34479	·39479	·44479	·49479	10¾
11	·29583	·34583	·39583	·44583	·49583	11
11¼	·29688	·34688	·39688	·44688	·49688	11¼
11½	·29792	·34792	·39792	·44792	·49792	11½
11¾	·29896	·34896	·39896	·44896	·49896	11¾

For explanation see pp. 21-23

Pence	**10**s.	**11**s.	**12**s.	**13**s.	**14**s.	Pence

THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £

Pence	**10**s.	**11**s.	**12**s.	**13**s.	**14**s.	Pence
0	·50000	·55000	·60000	·65000	·70000	0
0¼	·50104	·55104	·60104	·65104	·70104	0¼
0½	·50208	·55208	·60208	·65208	·70208	0½
0¾	·50313	·55313	·60313	·65313	·70313	0¾
1	·50417	·55417	·60417	·65417	·70417	1
1¼	·50521	·55521	·60521	·65521	·70521	1¼
1½	·50625	·55625	·60625	·65625	·70625	1½
1¾	·50729	·55729	·60729	·65729	·70729	1¾
2	·50833	·55833	·60833	·65833	·70833	2
2¼	·50938	·55938	·60938	·65938	·70938	2¼
2½	·51042	·56042	·61042	·66042	·71042	2½
2¾	·51146	·56146	·61146	·66146	·71146	2¾
3	·51250	·56250	·61250	·66250	·71250	3
3¼	·51354	·56354	·61354	·66354	·71354	3¼
3½	·51458	·56458	·61458	·66458	·71458	3½
3¾	·51563	·56563	·61563	·66563	·71563	3¾
4	·51667	·56667	·61667	·66667	·71667	4
4¼	·51771	·56771	·61771	·66771	·71771	4¼
4½	·51875	·56875	·61875	·66875	·71875	4½
4¾	·51979	·56979	·61979	·66979	·71979	4¾
5	·52083	·57083	·62083	·67083	·72083	5
5¼	·52188	·57188	·62188	·67188	·72188	5¼
5½	·52292	·57292	·62292	·67292	·72292	5½
5¾	·52396	·57396	·62396	·67396	·72396	5¾
6	·52500	·57500	·62500	·67500	·72500	6
6¼	·52604	·57604	·62604	·67604	·72604	6¼
6½	·52708	·57708	·62708	·67708	·72708	6½
6¾	·52813	·57813	·62813	·67813	·72813	6¾
7	·52917	·57917	·62917	·67917	·72917	7
7¼	·53021	·58021	·63021	·68021	·73021	7¼
7½	·53125	·58125	·63125	·68125	·73125	7½
7¾	·53229	·58229	·63229	·68229	·73229	7¾
8	·53333	·58333	·63333	·68333	·73333	8
8¼	·53438	·58438	·63438	·68438	·73438	8¼
8½	·53542	·58542	·63542	·68542	·73542	8½
8¾	·53646	·58646	·63646	·68646	·73646	8¾
9	·53750	·58750	·63750	·68750	·73750	9
9¼	·53854	·58854	·63854	·68854	·73854	9¼
9½	·53958	·58958	·63958	·68958	·73958	9½
9¾	·54063	·59063	·64063	·69063	·74063	9¾
10	·54167	·59167	·64167	·69167	·74167	10
10¼	·54271	·59271	·64271	·69271	·74271	10¼
10½	·54375	·59375	·64375	·69375	·74375	10½
10¾	·54479	·59479	·64479	·69479	·74479	10¾
11	·54583	·59583	·64583	·69583	·74583	11
11¼	·54688	·59688	·64688	·69688	·74688	11¼
11½	·54792	·59792	·64792	·69792	·74792	11½
11¾	·54896	·59896	·64896	·69896	·74896	11¾

THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £

Pence	15s.	16s.	17s.	18s.	19s.	Pence
0	·75000	·80000	·85000	·90000	·95000	0
0¼	·75104	·80104	·85104	·90104	·95104	0¼
0½	·75208	·80208	·85208	·90208	·95208	0½
0¾	·75313	·80313	·85313	·90313	·95313	0¾
1	·75417	·80417	·85417	·90417	·95417	1
1¼	·75521	·80521	·85521	·90521	·95521	1¼
1½	·75625	·80625	·85625	·90625	·95625	1½
1¾	·75729	·80729	·85729	·90729	·95729	1¾
2	·75833	·80833	·85833	·90833	·95833	2
2¼	·75938	·80938	·85938	·90938	·95938	2¼
2½	·76042	·81042	·86042	·91042	·96042	2½
2¾	·76146	·81146	·86146	·91146	·96146	2¾
3	·76250	·81250	·86250	·91250	·96250	3
3¼	·76354	·81354	·86354	·91354	·96354	3¼
3½	·76458	·81458	·86458	·91458	·96458	3½
3¾	·76563	·81563	·86563	·91563	·96563	3¾
4	·76667	·81667	·86667	·91667	·96667	4
4¼	·76771	·81771	·86771	·91771	·96771	4¼
4½	·76875	·81875	·86875	·91875	·96875	4½
4¾	·76979	·81979	·86979	·91979	·96979	4¾
5	·77083	·82083	·87083	·92083	·97083	5
5¼	·77188	·82188	·87188	·92188	·97188	5¼
5½	·77292	·82292	·87292	·92292	·97292	5½
5¾	·77396	·82396	·87396	·92396	·97396	5¾
6	·77500	·82500	·87500	·92500	·97500	6
6¼	·77604	·82604	·87604	·92604	·97604	6¼
6½	·77708	·82708	·87708	·92708	·97708	6½
6¾	·77813	·82813	·87813	·92813	·97813	6¾
7	·77917	·82917	·87917	·92917	·97917	7
7¼	·78021	·83021	·88021	·93021	·98021	7¼
7½	·78125	·83125	·88125	·93125	·98125	7½
7¾	·78229	·83229	·88229	·93229	·98229	7¾
8	·78333	·83333	·88333	·93333	·98333	8
8¼	·78438	·83438	·88438	·93438	·98438	8¼
8½	·78542	·83542	·88542	·93542	·98542	8½
8¾	·78646	·83646	·88646	·93646	·98646	8¾
9	·78750	·83750	·88750	·93750	·98750	9
9¼	·78854	·83854	·88854	·93854	·98854	9¼
9½	·78958	·83958	·88958	·93958	·98958	9½
9¾	·79063	·84063	·89063	·94063	·99063	9¾
10	·79167	·84167	·89167	·94167	·99167	10
10¼	·79271	·84271	·89271	·94271	·99271	10¼
10½	·79375	·84375	·89375	·94375	·99375	10½
10¾	·79479	·84479	·89479	·94479	·99479	10¾
11	·79583	·84583	·89583	·94583	·99583	11
11¼	·79688	·84688	·89688	·94688	·99688	11¼
11½	·79792	·84792	·89792	·94792	·99792	11½
11¾	·79896	·84896	·89896	·94896	·99896	11¾

For explanation see pp. 21–23

MORTALITY TABLES

SHOWING THE

EXPECTATION OF LIFE

AND THE

NUMBERS SURVIVING EACH YEAR

ACCORDING TO VARIOUS MORTALITY TABLES

THE EXPECTATION, OR AVERAGE DURATION, OF LIFE

Com-pleted Age	North-ampton Experience 1780	Carlisle Experience 1815	Equitable Society's Experience 1834	'Seventeen Offices'' Experience 1843	English Experience No. 3 (Males) 1864	Actuaries' HM. (Healthy Males) Experience 1869	Com-pleted Age
	Years	Years	Years	Years	Years	Years	
0	25·18	38·72	...	...	39·91	...	0
5	40·84	51·25	...	...	49·71	...	5
10	39·78	48·82	48·83	48·36	47·05	50·291	10
11	39·14	48·04	48·02	47·68	46·31	49·536	11
12	38·49	47·27	47·20	47·01	45·54	48·733	12
13	37·83	46·51	46·40	46·33	44·76	47·893	13
14	37·17	45·75	45·60	45·64	43·97	47·032	14
15	36·51	45·00	44·81	44·96	43·18	46·161	15
16	35·85	44·27	44·04	44·27	42·40	45·292	16
17	35·20	43·57	43·27	43·58	41·64	44·438	17
18	34·58	42·87	42·52	42·88	40·90	43·609	18
19	33·99	42·17	41·78	42·19	40·17	42·817	19
20	33·43	41·46	41·06	41·49	39·48	42·061	20
21	32·90	40·75	40·33	40·79	38·80	41·326	21
22	32·39	40·04	39·60	40·09	38·13	40·603	22
23	31·88	39·31	38·88	39·39	37·46	39·879	23
24	31·36	38·59	38·16	38·68	36·79	39·147	24
25	30·85	37·86	37·44	37·98	36·12	38·405	25
26	30·33	37·14	36·73	37·27	35·44	37·658	26
27	29·82	36·41	36·02	36·56	34·77	36·908	27
28	29·30	35·69	35·33	35·86	34·10	36·162	28
29	28·79	35·00	34·65	35·15	33·43	35·419	29
30	28·27	34·34	33·98	34·43	32·76	34·681	30
31	27·76	33·68	33·30	33·72	32·09	33·946	31
32	27·24	33·03	32·64	33·01	31·42	33·213	32
33	26·72	32·36	31·98	32·30	30·74	32·481	33
34	26·20	31·68	31·32	31·58	30·07	31·748	34
35	25·68	31·00	30·66	30·87	29·40	31·016	35
36	25·16	30·32	30·01	30·15	28·73	30·286	36
37	24·64	29·64	29·35	29·44	28·06	29·560	37
38	24·12	28·96	28·70	28·72	27·39	28·838	38
39	23·60	28·28	28·05	28·00	26·72	28·118	39
40	23·08	27·61	27·40	27·28	26·06	27·399	40
41	22·56	26·97	26·74	26·56	25·39	26·679	41
42	22·04	26·34	26·07	25·84	24·73	25·956	42
43	21·54	25·71	25·40	25·12	24·07	25·233	43
44	21·03	25·09	24·75	24·40	23·41	24·511	44
45	20·52	24·46	24·10	23·69	22·76	23·792	45
46	20·02	23·82	23·44	22·97	22·11	23·079	46
47	19·51	23·17	22·78	22·27	21·46	22·375	47
48	19·00	22·50	22·12	21·56	20·82	21·679	48
49	18·49	21·81	21·47	20·87	20·17	20·989	49

For explanation see pp. 23–25

THE EXPECTATION, OR AVERAGE DURATION, OF LIFE

Completed Age	Northampton Experience 1780	Carlisle Experience 1815	Equitable Society's Experience 1834	'Seventeen Offices'' Experience 1843	English Experience No. 3 (Males) 1864	Actuaries' HM. (Healthy Males) Experience 1869	Completed Age
	Years	Years	Years	Years	Years	Years	
50	17·99	21·11	20·83	20·18	19·54	20·306	50
51	17·50	20·39	20·20	19·50	18·90	19·627	51
52	17·02	19·68	19·59	18·82	18·28	18·951	52
53	16·54	18·97	19·00	18·16	17·67	18·281	53
54	16·06	18·28	18·43	17·50	17·06	17·618	54
55	15·58	17·58	17·85	16·86	16·45	16·962	55
56	15·10	16·89	17·28	16·22	15·86	16·316	56
57	14·63	16·21	16·71	15·59	15·26	15·679	57
58	14·15	15·55	16·15	14·97	14·68	15·052	58
59	13·68	14·92	15·60	14·37	14·10	14·435	59
60	13·21	14·34	15·06	13·77	13·53	13·830	60
61	12·75	13·82	14·51	13·18	12·96	13·237	61
62	12·28	13·31	13·96	12·61	12·41	12·659	62
63	11·81	12·81	13·42	12·05	11·87	12·095	63
64	11·35	12·30	12·88	11·51	11·34	11·547	64
65	10·88	11·79	12·35	10·97	10·82	11·012	65
66	10·42	11·27	11·83	10·46	10·32	10·489	66
67	9·96	10·75	11·32	9·96	9·83	9·977	67
68	9·50	10·23	10·82	9·47	9·36	9·475	68
69	9·05	9·70	10·32	9·00	8·90	8·980	69
70	8·60	9·18	9·84	8·54	8·45	8·495	70
71	8·17	8·65	9·36	8·10	8·03	8·026	71
72	7·74	8·16	8·88	7·67	7·62	7·575	72
73	7·33	7·72	8·42	7·26	7·22	7·148	73
74	6·92	7·33	7·97	6·86	6·85	6·749	74
75	6·54	7·01	7·52	6·48	6·49	6·376	75
76	6·18	6·69	7·08	6·11	6·15	6·017	76
77	5·83	6·40	6·64	5·76	5·82	5·674	77
78	5·48	6·12	6·20	5·42	5·51	5·344	78
79	5·11	5·80	5·78	5·09	5·21	5·025	79
80	4·75	5·51	5·38	4·78	4·93	4·719	80
81	4·41	5·21	5·00	4·48	4·66	4·433	81
82	4·09	4·93	4·63	4·18	4·41	4·171	82
83	3·80	4·65	4·30	3·90	4·17	3·930	83
84	3·58	4·39	4·00	3·63	3·95	3·713	84
85	3·37	4·12	3·73	3·36	3·73	3·511	85
86	3·19	3·90	3·50	3·10	3·53	3·310	86
87	3·01	3·71	3·31	2·84	3·34	3·101	87
88	2·86	3·59	3·11	2·59	3·16	2·884	88
89	2·66	3·47	2·91	2·35	3·00	2·634	89
90	2·41	3·28	2·65	2·11	2·84	2·357	90
91	2·09	3·26	2·36	1·89	2·69	2·077	91
92	1·75	3·37	2·03	1·67	2·55	1·795	92
93	1·37	3·48	1·70	1·47	2·41	1·496	93
94	1·05	3·53	1·31	1·28	2·29	1·204	94
95	·75	3·53	1·05	1·12	2·17	·930	95
96	·50	3·46	·75	·99	2·06	·684	96
97	...	3·28	·50	·89	1·95	·500	97
98	...	3·07	...	·75	1·85	...	98
99	...	2·77	...	·50	1·76	...	99

ENGLISH LIFE TABLE, No. 3

Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year	Number Living at Beginning of Year		Age at Beginning of Year
			Males	Females	
0	1,000,000	149,493	511,745	488,255	0
1	850,507	53,680	428,026	422,481	1
2	796,827	28,238	400,505	396,322	2
3	768,589	18,456	386,290	382,299	3
4	750,133	13,315	377,077	373,056	4
5	736,818	9,899	370,358	366,460	5
6	726,919	7,768	365,325	361,594	6
7	719,151	6,559	361,372	357,779	7
8	712,592	5,458	358,062	354,530	8
9	707,134	4,625	355,328	351,806	9
10	702,509	4,028	353,031	349,478	10
11	698,481	3,637	351,048	347,433	11
12	694,844	3,431	349,272	345,572	12
13	691,413	3,382	347,606	343,807	13
14	688,031	3,468	345,969	342,062	14
15	684,563	3,669	344,290	340,273	15
16	680,894	3,957	342,509	338,385	16
17	676,937	4,317	340,581	336,356	17
18	672,620	4,720	338,469	334,151	18
19	667,900	5,150	336,149	331,751	19
20	662,750	5,583	333,608	329,142	20
21	657,167	5,668	330,844	326,323	21
22	651,499	5,748	328,043	323,456	22
23	645,751	5,820	325,207	320,544	23
24	639,931	5,886	322,339	317,592	24
25	634,045	5,950	319,442	314,603	25
26	628,095	6,009	316,516	311,579	26
27	622,086	6,065	313,562	308,524	27
28	616,021	6,121	310,581	305,440	28
29	609,900	6,176	307,572	302,328	29
30	603,724	6,231	304,534	299,190	30
31	597,493	6,287	301,466	296,027	31
32	591,206	6,343	298,366	292,840	32
33	584,863	6,404	295,232	289,631	33
34	578,459	6,466	292,061	286,398	34
35	571,993	6,533	288,850	283,143	35
36	565,460	6,601	285,596	279,864	36
37	558,859	6,678	282,296	276,563	37
38	552,181	6,756	278,944	273,237	38
39	545,425	6,841	275,538	269,887	39
40	538,584	6,931	272,073	266,511	40
41	531,653	7,027	268,544	263,109	41
42	524,626	7,127	264,948	259,678	42
43	517,499	7,236	261,280	256,219	43
44	510,263	7,348	257,534	252,729	44
45	502,915	7,467	253,708	249,207	45
46	495,448	7,592	249,796	245,652	46
47	487,856	7,722	245,795	242,061	47
48	480,134	7,857	241,700	238,434	48
49	472,277	7,997	237,508	234,769	49

For explanation see pp. 23–25

ENGLISH LIFE TABLE, No. 3

Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year	Number Living at Beginning of Year		Age at Beginning of Year
			Males	Females	
50	464,280	8,141	233,216	231,064	50
51	456,139	8,414	228,821	227,318	51
52	447,725	8,590	224,195	223,530	52
53	439,135	8,761	219,437	219,698	53
54	430,374	9,259	214,552	215,822	54
55	421,115	9,583	209,539	211,576	55
56	411,532	9,909	204,395	207,137	56
57	401,623	10,245	199,114	202,509	57
58	391,378	10,593	193,686	197,692	58
59	380,785	10,958	188,102	192,683	59
60	369,827	11,338	182,350	187,477	60
61	358,489	11,737	176,421	182,068	61
62	346,752	12,149	170,303	176,449	62
63	334,603	12,572	163,989	170,614	63
64	322,031	13,002	157,474	164,557	64
65	309,029	13,430	150,754	158,275	65
66	295,599	13,846	143,833	151,766	66
67	281,753	14,244	136,718	145,035	67
68	267,509	14,607	129,421	138,088	68
69	252,902	14,925	121,963	130,939	69
70	237,977	15,184	114,370	123,607	70
71	222,793	15,369	106,675	116,118	71
72	207,424	15,468	98,919	108,505	72
73	191,956	15,469	91,149	100,807	73
74	176,487	15,363	83,416	93,071	74
75	161,124	15,136	75,777	85,347	75
76	145,988	14,789	68,294	77,694	76
77	131,199	14,319	61,026	70,173	77
78	116,880	13,726	54,036	62,844	78
79	103,154	13,021	47,381	55,773	79
80	90,133	12,214	41,115	49,018	80
81	77,919	11,320	35,283	42,636	81
82	66,599	10,358	29,922	36,677	82
83	56,241	9,352	25,060	31,181	83
84	46,889	8,324	20,71⁻	26,178	84
85	38,565	7,300	16,877	21,688	85
86	31,265	6,298	13,549	17,716	86
87	24,967	5,346	10,709	14,258	87
88	19,621	4,459	8,325	11,296	88
89	15,162	3,653	6,360	8,802	89
90	11,509	2,933	4,770	6,739	90
91	8,576	2,310	3,510	5,066	91
92	6,266	1,781	2,531	3,735	92
93	4,485	1,343	1,787	2,698	93
94	3,142	989	1,234	1,908	94
95	2,153	713	833	1,320	95
96	1,440	500	548	892	96
97	940	342	352	588	97
98	598	228	220	378	98
99	...	370	...	...	99

INSTITUTE OF ACTUARIES MORTALITY TABLE
HEALTHY MALES (HM.)

Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year	Probable Number out of every 100 Alive at the Beginning of a Year		Age at Beginning of Year
			who will Survive the Year	who will Die during the Year	
1	2	3	4	5	6
10	100,000	490	99·5100	·4900	10
11	99,510	397	99·6010	·3990	11
12	99,113	329	99·6681	·3319	12
13	98,784	288	99·7085	·2915	13
14	98,496	272	99·7238	·2762	14
15	98,224	282	99·7129	·2871	15
16	97,942	318	99·6753	·3247	16
17	97,624	379	99·6118	·3882	17
18	97,245	466	99·5208	·4792	18
19	96,779	556	99·4255	·5745	19
20	96,223	609	99·3671	·6329	20
21	95,614	643	99·3275	·6725	21
22	94,971	650	99·3156	·6844	22
23	94,321	638	99·3236	·6764	23
24	93,683	622	99·3361	·6639	24
25	93,061	617	99·3370	·6630	25
26	92,444	618	99·3315	·6685	26
27	91,826	634	99·3096	·6904	27
28	91,192	654	99·2828	·7172	28
29	90,538	673	99·2567	·7433	29
30	89,865	694	99·2277	·7723	30
31	89,171	706	99·2083	·7917	31
32	88,465	717	99·1895	·8105	32
33	87,748	727	99·1715	·8285	33
34	87,021	740	99·1496	·8504	34
35	86,281	757	99·1226	·8774	35
36	85,524	779	99·0891	·9109	36
37	84,745	802	99·0536	·9464	37
38	83,943	821	99·0220	·9780	38
39	83,122	838	98·9918	1·0082	39
40	82,284	848	98·9694	1·0306	40
41	81,436	854	98·9513	1·0487	41
42	80,582	865	98·9266	1·0734	42
43	79,717	887	98·8873	1·1127	43
44	78,830	911	98·8444	1·1556	44
45	77,919	950	98·7808	1·2192	45
46	76,969	996	98·7060	1·2940	46
47	75,973	1,041	98·6298	1·3702	47
48	74,932	1,082	98·5560	1·4440	48
49	73,850	1,124	98·4780	1·5220	49
50	72,726	1,160	98·4050	1·5950	50
51	71,566	1,193	98·3330	1·6670	51
52	70,373	1,235	98·2451	1·7549	52
53	69,138	1,286	98·1400	1·8600	53
54	67,852	1,339	98·0266	1·9734	54

For explanation see pp. 23–25

INSTITUTE OF ACTUARIES MORTALITY TABLE

HEALTHY MALES (HM.)

Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year	Probable Number out of every 100 Alive at the Beginning of a Year		Age at Beginning of Year
			who will Survive the Year	who will Die during the Year	
1	2	3	4	5	6
55	66,513	1,399	97·8967	2·1033	55
56	65,114	1,462	97·7547	2·2453	56
57	63,652	1,527	97·6010	2·3990	57
58	62,125	1,592	97·4374	2·5626	58
59	60,533	1,667	97·2461	2·7539	59
60	58,866	1,747	97·0322	2·9678	60
61	57,119	1,830	96·7962	3·2038	61
62	55,289	1,915	96·5364	3·4636	62
63	53,374	2,001	96·2510	3·7490	63
64	51,373	2,076	95·9590	4·0410	64
65	49,297	2,141	95·6569	4·3431	65
66	47,156	2,196	95·3431	4·6569	66
67	44,960	2,243	95·0111	4·9889	67
68	42,717	2,274	94·6766	5·3234	68
69	40,443	2,319	94·2660	5·7340	69
70	38,124	2,371	93·7808	6·2192	70
71	35,753	2,433	93·1950	6·8050	71
72	33,320	2,497	92·5060	7·4940	72
73	30,823	2,554	91·7140	8·2860	73
74	28,269	2,578	90·8805	9·1195	74
75	25,691	2,527	90·1639	9·8361	75
76	23,164	2,464	89·3628	10·6372	76
77	20,700	2,374	88·5314	11·4686	77
78	18,326	2,258	87·6787	12·3213	78
79	16,068	2,138	86·6941	13·3059	79
80	13,930	2,015	85·5348	14·4652	80
81	11,915	1,883	84·1964	15·8036	81
82	10,032	1,719	82·8648	17·1352	82
83	8,313	1,545	81·4147	18·5853	83
84	6,768	1,346	80·1123	19·8877	84
85	5,422	1,138	79·0115	20·9885	85
86	4,284	941	78·0345	21·9655	86
87	3,343	773	76·8770	23·1230	87
88	2,570	615	76·0700	23·9300	88
89	1,955	495	74·6804	25·3196	89
90	1,460	408	72·0548	27·9452	90
91	1,052	329	68·7263	31·2737	91
92	723	254	64·8686	35·1314	92
93	469	195	58·4222	41·5778	93
94	274	139	49·2700	50·7300	94
95	135	86	36·2964	63·7036	95
96	49	40	18·3673	81·6327	96
97	9	9	00·0000	100·0000	97

CARLISLE TABLE

Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year	Age at Beginning of Year	Number Living at Beginning of Year	Number Dying during the Year
0	10,000	1,539	50	4,397	59
1	8,461	682	51	4,338	62
2	7,779	505	52	4,276	65
3	7,274	276	53	4,211	68
4	6,998	201	54	4,143	70
5	6,797	121	55	4,073	73
6	6,676	82	56	4,000	76
7	6,594	58	57	3,924	82
8	6,536	43	58	3,842	93
9	6,493	33	59	3,749	106
10	6,460	29	60	3,643	122
11	6,431	31	61	3,521	126
12	6,400	32	62	3,395	127
13	6,368	33	63	3,268	125
14	6,335	35	64	3,143	125
15	6,300	39	65	3,018	124
16	6,261	42	66	2,894	123
17	6,219	43	67	2,771	123
18	6,176	43	68	2,648	123
19	6,133	43	69	2,525	124
20	6,090	43	70	2,401	124
21	6,047	42	71	2,277	134
22	6,005	42	72	2,143	146
23	5,963	42	73	1,997	156
24	5,921	42	74	1,841	166
25	5,879	43	75	1,675	160
26	5,836	43	76	1,515	156
27	5,793	45	77	1,359	146
28	5,748	50	78	1,213	132
29	5,698	56	79	1,081	128
30	5,642	57	80	953	116
31	5,585	57	81	837	112
32	5,528	56	82	725	102
33	5,472	55	83	623	94
34	5,417	55	84	529	84
35	5,362	55	85	445	78
36	5,307	56	86	367	71
37	5,251	57	87	296	64
38	5,194	58	88	232	51
39	5,136	61	89	181	39
40	5,075	60	90	142	37
41	5,009	69	91	105	30
42	4,940	71	92	75	21
43	4,869	71	93	54	14
44	4,798	71	94	40	10
45	4,727	70	95	30	7
46	4,657	69	96	23	5
47	4,588	67	97	18	4
48	4,521	63	98	14	3
49	4,458	61	99	11	2

TABLES

MORTALITY OF SINGLE LIVES

AND

INTEREST

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	Age
1	16·021	13·465	11·563	10·107	1
2	18·599	15·633	13·420	11·724	2
3	19·575	16·462	14·135	12·348	3
4	20·210	17·010	14·613	12·769	4
5	20·473	17·248	14·827	12·962	5
6	20·727	17·482	15·041	13·156	6
7	20·853	17·611	15·166	13·275	7
8	20·885	17·662	15·226	13·337	8
9	20·812	17·625	15·210	13·335	9
10	20·663	17·523	15·139	13·285	10
11	20·480	17·393	15·043	13·212	11
12	20·283	17·251	14·937	13·130	12
13	20·081	17·103	14·826	13·044	13
14	19·872	16·950	14·710	12·953	14
15	19·657	16·791	14·588	12·857	15
16	19·435	16·625	14·460	12·755	16
17	19·218	16·462	14·334	12·655	17
18	19·013	16·309	14·217	12·562	18
19	18·820	16·167	14·108	12·477	19
20	18·638	16·033	14·007	12·398	20
21	18·470	15·912	13·917	12·329	21
22	18·311	15·797	13·833	12·265	22
23	18·148	15·680	13·746	12·200	23
24	17·983	15·560	13·658	12·132	24
25	17·814	15·438	13·567	12·063	25
26	17·642	15·312	13·473	11·992	26
27	17·467	15·184	13·377	11·917	27
28	17·289	15·053	13·278	11·841	28
29	17·107	14·918	13·177	11·763	29
30	16·922	14·781	13·072	11·682	30
31	16·732	14·639	12·965	11·598	31
32	16·540	14·495	12·854	11·512	32
33	16·343	14·347	12·740	11·423	33
34	16·142	14·195	12·623	11·331	34
35	15·938	14·039	12·502	11·236	35
36	15·729	13·880	12·377	11·137	36
37	15·515	13·716	12·249	11·035	37
38	15·298	13·548	12·116	10·929	38
39	15·075	13·375	11·979	10·819	39
40	14·848	13·197	11·837	10·705	40
41	14·620	13·018	11·695	10·589	41
42	14·391	12·838	11·551	10·473	42
43	14·162	12·657	11·407	10·356	43
44	13·929	12·472	11·258	10·235	44
45	13·692	12·283	11·105	10·110	45

For explanation see pp. 25–27

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	Age
46	13·450	12·089	10·947	9·980	46
47	13·203	11·890	10·784	9·846	47
48	12·951	11·685	10·616	9·707	48
49	12·693	11·475	10·443	9·563	49
50	12·436	11·264	10·269	9·417	50
51	12·183	11·057	10·097	9·273	51
52	11·930	10·849	9·925	9·129	52
53	11·674	10·637	9·748	8·980	53
54	11·414	10·421	9·567	8·827	54
55	11·150	10·201	9·382	8·670	55
56	10·882	9·977	9·193	8·509	56
57	10·611	9·749	8·999	8·343	57
58	10·337	9·516	8·801	8·173	58
59	10·058	9·280	8·599	7·999	59
60	9·777	9·039	8·392	7·820	60
61	9·493	8·795	8·181	7·637	61
62	9·205	8·547	7·966	7·449	62
63	8·910	8·291	7·742	7·253	63
64	8·611	8·030	7·514	7·052	64
65	8·304	7·761	7·276	6·841	65
66	7·994	7·488	7·034	6·625	66
67	7·682	7·211	6·787	6·405	67
68	7·367	6·930	6·536	6·179	68
69	7·051	6·647	6·281	5·949	69
70	6·734	6·361	6·023	5·716	70
71	6·418	6·076	5·764	5·479	71
72	6·103	5·790	5·504	5·241	72
73	5·794	5·507	5·245	5·004	73
74	5·491	5·230	4·990	4·769	74
75	5·199	4·962	4·744	4·542	75
76	4·925	4·710	4·511	4·326	76
77	4·652	4·457	4·277	4·109	77
78	4·372	4·197	4·035	3·884	78
79	4·077	3·921	3·776	3·641	79
80	3·781	3·643	3·515	3·394	80
81	3·499	3·377	3·263	3·156	81
82	3·229	3·122	3·020	2·926	82
83	2·982	2·887	2·797	2·713	83
84	2·793	2·708	2·627	2·551	84
85	2·620	2·543	2·471	2·402	85
86	2·462	2·393	2·328	2·266	86
87	2·312	2·251	2·193	2·138	87
88	2·185	2·131	2·080	2·031	88
89	2·013	1·967	1·924	1·882 ·	89
90	1·794	1·758	1·723	1·689	90

H

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE CARLISLE TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
1	20·085	16·556	13·995	12·078	10·605	9·439	1
2	21·501	17·728	14·983	12·925	11·342	10·088	2
3	22·683	18·717	15·824	13·652	11·978	10·651	3
4	23·285	19·233	16·271	14·042	12·322	10·957	4
5	23·693	19·594	16·590	14·325	12·574	11·184	5
6	23·846	19·747	16·735	14·460	12·698	11·298	6
7	23·867	19·792	16·790	14·518	12·756	11·354	7
8	23·801	19·766	16·786	14·526	12·770	11·371	8
9	23·677	19·693	16·742	14·500	12·754	11·362	9
10	23·512	19·585	16·669	14·448	12·717	11·334	10
11	23·327	19·460	16·581	14·384	12·669	11·296	11
12	23·143	19·336	16·494	14·321	12·621	11·259	12
13	22·957	19·210	16·406	14·257	12·572	11·221	13
14	22·769	19·082	16·316	14·191	12·522	11·182	14
15	22·582	18·956	16·227	14·126	12·473	11·144	15
16	22·404	18·837	16·144	14·067	12·429	11·111	16
17	22·232	18·723	16·066	14·012	12·389	11·081	17
18	22·058	18·608	15·987	13·956	12·348	11·051	18
19	21·879	18·488	15·904	13·897	12·305	11·019	19
20	21·694	18·363	15·817	13·835	12·259	10·985	20
21	21·504	18·233	15·726	13·769	12·210	10·948	21
22	21·304	18·095	15·628	13·697	12·156	10·906	22
23	21·098	17·951	15·525	13·621	12·098	10·861	23
24	20·885	17·801	15·417	13·541	12·037	10·813	24
25	20·665	17·645	15·303	13·456	11·972	10·762	25
26	20·442	17·486	15·187	13·368	11·904	10·709	26
27	20·212	17·320	15·065	13·275	11·832	10·652	27
28	19·981	17·154	14·942	13·182	11·759	10·594	28
29	19·761	16·997	14·827	13·096	11·693	10·542	29
30	19·556	16·852	14·723	13·020	11·636	10·498	30
31	19·348	16·705	14·617	12·942	11·578	10·454	31
32	19·134	16·552	14·506	12·860	11·516	10·407	32
33	18·910	16·390	14·387	12·771	11·448	10·355	33
34	18·675	16·219	14·260	12·675	11·374	10·297	34
35	18·433	16·041	14·127	12·573	11·295	10·235	35
36	18·183	15·856	13·987	12·465	11·211	10·168	36
37	17·928	15·666	13·843	12·354	11·124	10·098	37
38	17·669	15·471	13·695	12·239	11·033	10·026	38
39	17·405	15·272	13·542	12·120	10·939	9·950	39
40	17·143	15·074	13·390	12·002	10·845	9·875	40
41	16·890	14·883	13·245	11·890	10·757	9·805	41
42	16·640	14·694	13·101	11·779	10·671	9·737	42
43	16·389	14·505	12·957	11·668	10·585	9·669	43
44	16·130	14·308	12·806	11·551	10·494	9·597	44
45	15·863	14·104	12·648	11·428	10·397	9·520	45
46	15·585	13·889	12·480	11·296	10·292	9·436	46
47	15·294	13·662	12·301	11·154	10·178	9·344	47
48	14·986	13·419	12·107	10·998	10·052	9·241	48
49	14·654	13·153	11·892	10·823	9·908	9·121	49
50	14·303	12·869	11·660	10·631	9·749	8·987	50

For explanation see pp. 25–27

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE CARLISLE TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
51	13·932	12·566	11·410	10·422	9·573	8·838	51
52	13·558	12·258	11·154	10·208	9·392	8·684	52
53	13·180	11·945	10·892	9·988	9·205	8·523	53
54	12·798	11·627	10·624	9·761	9·011	8·356	54
55	12·408	11·300	10·347	9·524	8·807	8·179	55
56	12·014	10·966	10·063	9·280	8·595	7·995	56
57	11·614	10·625	9·771	9·027	8·375	7·802	57
58	11·218	10·286	9·478	8·772	8·153	7·606	58
59	10·841	9·963	9·199	8·529	7·940	7·418	59
60	10·491	9·663	8·940	8·304	7·743	7·245	60
61	10·180	9·398	8·712	8·108	7·572	7·095	61
62	9·875	9·137	8·487	7·913	7·403	6·947	62
63	9·567	8·872	8·258	7·714	7·229	6·795	63
64	9·246	8·593	8·016	7·502	7·042	6·630	64
65	8·917	8·307	7·765	7·281	6·847	6·457	65
66	8·578	8·010	7·503	7·049	6·641	6·272	66
67	8·228	7·700	7·227	6·803	6·421	6·075	67
68	7·869	7·380	6·941	6·546	6·189	5·866	68
69	7·499	7·049	6·643	6·277	5·945	5·643	69
70	7·123	6·709	6·336	5·998	5·690	5·410	70
71	6·737	6·358	6·015	5·704	5·420	5·160	71
72	6·373	6·026	5·711	5·424	5·162	4·922	72
73	6·044	5·725	5·435	5·170	4·927	4·704	73
74	5·752	5·458	5·190	4·944	4·719	4·511	74
75	5·512	5·239	4·989	4·760	4·549	4·355	75
76	5·277	5·024	4·792	4·579	4·382	4·200	76
77	5·059	4·825	4·609	4·410	4·227	4·056	77
78	4·838	4·622	4·422	4·238	4·067	3·908	78
79	4·592	4·394	4·210 ·	4·040	3·883	3·736	79
80	4·365	4·183	4·015	3·858	3·713	3·577	80
81	4·119	3·953	3·799	3·656	3·523	3·398	81
82	3·898	3·746	3·606	3·474	3·352	3·237	82
83	3·672	3·534	3·406	3·286	3·174	3·069	83
84	3·454	3·329	3·211	3·102	2·999	2·903	84
85	3·229	3·115	3·009	2·909	2·815	2·727	85
86	3·033	2·928	2·830	2·739	2·652	2·571	86
87	2·873	2·776	2·685	2·599	2·519	2·440	87
88	2·776	2·683	2·597	2·515	2·439	2·366	88
89	2·665	2·577	2·495	2·417	2·344	2·276	89
90	2·499	2·416	2·339	2·266	2·198	2·133	90
91	2·481	2·398	2·321	2·248	2·180	2·115	91
92	2·577	2·492	2·412	2·337	2·266	2·198	92
93	2·687	2·600	2·518	2·440	2·367	2·297	93
94	2·736	2·650	2·569	2·492	2·419	2·350	94
95	2·757	2·674	2·596	2·522	2·451	2·383	95
96	2·704	2·628	2·555	2·486	2·420	2·358	96
97	2·559	2·492	2·428	2·368	2·309	2·253	97
98	2·388	2·332	2·278	2·227	2·177	2·129	98
99	2·131	2·087	2·045	2·004	1·964	1·926	99
100	1·683	1·653	1·624	1·596	1·569	1·543	100

H 2

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE.

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	$4\frac{1}{2}$ %	5 %	Age
10	26·732	24·148	21·954	20·077	18·459	17·057	10
11	26·535	23·995	21·834	19·982	18·385	16·998	11
12	26·307	23·814	21·689	19·865	18·289	16·919	12
13	26·055	23·610	21·523	19·728	18·176	16·824	13
14	25·785	23·390	21·341	19·578	18·049	16·717	14
15	25·502	23·158	21·149	19·417	17·914	16·602	15
16	25·215	22·922	20·953	19·252	17·774	16·482	16
17	24·930	22·686	20·757	19·087	17·634	16·362	17
18	24·653	22·458	20·567	18·928	17·499	16·248	18
19	24·390	22·243	20·389	18·780	17·375	16·142	19
20	24·145	22·043	20·225	18·644	17·262	16·047	20
21	23·906	21·848	20·066	18·513	17·153	15·957	21
22	23·669	21·656	19·909	18·384	17·047	15·868	22
23	23·428	21·460	19·748	18·251	16·937	15·776	23
24	23·178	21·254	19·578	18·110	16·819	15·678	24
25	22·916	21·038	19·399	17·961	16·694	15·572	25
26	22·646	20·814	19·212	17·804	16·561	15·460	26
27	22·368	20·582	19·018	17·641	16·423	15·342	27
28	22·086	20·347	18·820	17·474	16·281	15·221	28
29	21·802	20·109	18·620	17·304	16·137	15·097	29
30	21·515	19·867	18·416	17·131	15·989	14·971	30
31	21·224	19·623	18·209	16·955	15·839	14·842	31
32	20·928	19·373	17·996	16·774	15·684	14·708	32
33	20·627	19·117	17·778	16·587	15·523	14·570	33
34	20·319	18·855	17·554	16·395	15·358	14·426	34
35	20·006	18·587	17·325	16·197	15·186	14·277	35
36	19·687	18·314	17·090	15·994	15·010	14·124	36
37	19·365	18·037	16·850	15·786	14·830	13·966	37
38	19·039	17·756	16·607	15·575	14·645	13·805	38
39	18·708	17·469	16·358	15·358	14·455	13·638	39
40	18·371	17·176	16·103	15·135	14·260	13·466	40
41	18·026	16·876	15·840	14·904	14·056	13·287	41
42	17·672	16·566	15·568	14·664	13·845	13·099	42
43	17·311	16·248	15·288	14·417	13·625	12·903	43
44	16·943	15·924	15·001	14·162	13·398	12·701	44
45	16·570	15·594	14·707	13·901	13·165	12·491	45
46	16·194	15·260	14·410	13·635	12·927	12·278	46
47	15·816	14·923	14·110	13·366	12·686	12·061	47
48	15·437	14·585	13·806	13·094	12·441	11·840	48
49	15·055	14·242	13·499	12·817	12·191	11·614	49
50	14·669	13·896	13·187	12·536	11·936	11·383	50
51	14·280	13·545	12·870	12·249	11·676	11·146	51
52	13·885	13·188	12·547	11·955	11·408	10·902	52
53	13·486	12·826	12·218	11·655	11·134	10·651	53
54	13·086	12·462	11·885	11·351	10·856	10·396	54

For explanation see pp. 25–27.

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	$4\frac{1}{2}\%$	5%	Age
55	12·683	12·094	11·549	11·043	10·573	10·135	55
56	12·279	11·724	11·210	10·731	10·286	9·871	56
57	11·875	11·353	10·868	10·417	9·996	9·602	57
58	11·471	10·981	10·525	10·100	9·702	9·330	58
59	11·067	10·608	10·180	9·780	9·405	9·054	59
60	10·665	10·236	9·835	9·459	9·107	8·776	60
61	10·266	9·866	9·490	9·138	8·808	8·497	61
62	9·871	9·498	9·148	8·818	8·509	8·217	62
63	9·481	9·134	8·807	8·500	8·211	7·938	63
64	9·096	8·774	8·471	8·185	7·914	7·659	64
65	8·716	8·418	8·136	7·870	7·619	7·381	65
66	8·340	8·064	7·803	7·557	7·323	7·102	66
67	7·966	7·712	7·471	7·243	7·026	6·821	67
68	7·594	7·360	7·139	6·928	6·728	6·538	68
69	7·221	7·007	6·804	6·610	6·426	6·251	69
70	6·852	6·657	6·470	6·293	6·124	5·963	70
71	6·489	6·311	6·141	5·979	5·824	5·676	71
72	6·137	5·975	5·820	5·672	5·530	5·395	72
73	5·800	5·653	5·512	5·377	5·247	5·123	73
74	5·482	5·348	5·220	5·097	4·979	4·866	74
75	5·183	5·061	4·945	4·833	4·725	4·622	75
76	4·892	4·782	4·676	4·574	4·476	4·382	76
77	4·611	4·512	4·416	4·324	4·235	4·149	77
78	4·339	4·249	4·162	4·079	3·998	3·921	78
79	4·073	3·992	3·914	3·838	3·765	3·695	79
80	3·815	3·742	3·672	3·604	3·539	3·475	80
81	3·572	3·507	3·444	3·382	3·323	3·266	81
82	3·348	3·290	3·233	3·178	3·125	3·073	82
83	3·142	3·089	3·038	2·989	2·941	2·894	83
84	2·955	2·908	2·862	2·818	2·774	2·732	84
85	2·781	2·739	2·698	2·658	2·619	2·581	85
86	2·608	2·570	2·534	2·498	2·464	2·430	86
87	2·425	2·393	2·361	2·330	2·299	2·270	87
88	2·234	2·206	2·178	2·152	2·125	2·100	88
89	2·010	1·987	1·964	1·942	1·920	1·898	89
90	1·758	1·740	1·722	1·704	1·686	1·669	90
91	1·501	1·487	1·473	1·459	1·446	1·432	91
92	1·239	1·229	1·219	1·208	1·198	1·188	92
93	·958	·951	·944	·937	·930	·924	93
94	·681	·677	·673	·668	·664	·660	94
95	·418	·415	·413	·411	·408	·406	95
96	·179	·178	·178	·177	·176	·175	96
97	·000	·000	·000	·000	·000	·000	97

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE GOVERNMENT EXPERIENCE, 1883

MALES

Age	2½ %	3 %	3½ %	4 %	5 %	Age
20	22·434	20·561	18·936	...	...	20
25	21·282	19·601	18·130	...	...	25
30	20·079	18·588	17·271	...	...	30
35	18·822	17·515	16·353	...	...	35
40	17·501	16·376	15·365	14·454	12·883	40
41	17·227	16·138	15·158	14·273	12·743	41
42	16·950	15·897	14·947	14·088	12·599	42
43	16·670	15·653	14·733	13·899	12·451	43
44	16·387	15·404	14·514	13·707	12·300	44
45	16·099	15·152	14·292	13·510	12·145	45
46	15·807	14·895	14·065	13·309	11·986	46
47	15·511	14·633	13·833	13·103	11·822	47
48	15·209	14·365	13·595	12·891	11·653	48
49	14·900	14·091	13·351	12·673	11·477	49
50	14·588	13·813	13·103	12·450	11·298	50
51	14·268	13·526	12·845	12·219	11·110	51
52	13·941	13·233	12·582	11·982	10·916	52
53	13·608	12·933	12·311	11·737	10·714	53
54	13·267	12·625	12·032	11·484	10·506	54
55	12·919	12·309	11·746	11·224	10·289	55
56	12·563	11·986	11·451	10·955	10·063	56
57	12·198	11·653	11·146	10·676	9·828	57
58	11·823	11·310	10·832	10·387	9·583	58
59	11·439	10·956	10·506	10·086	9·326	59
60	11·054	10·601	10·178	9·783	9·065	60
61	10·678	10·254	9·857	9·485	8·808	61
62	10·314	9·916	9·543	9·194	8·556	62
63	9·948	9·577	9·228	8·900	8·300	63
64	9·586	9·239	8·913	8·605	8·041	64
65	9·225	8·902	8·597	8·309	7·781	65
66	8·875	8·573	8·289	8·020	7·525	66
67	8·533	8·252	7·987	7·736	7·273	67
68	8·196	7·936	7·689	7·455	7·023	68
69	7·858	7·617	7·388	7·171	6·768	69
70	7·521	7·299	7·087	6·886	6·512	70
71	7·191	6·986	6·790	6·604	6·257	71
72	6·864	6·675	6·495	6·323	6·003	72
73	6·546	6·373	6·208	6·050	5·754	73
74	6·245	6·086	5·934	5·788	5·515	74
75	5·955	5·809	5·669	5·535	5·283	75
76	5·672	5·538	5·410	5·286	5·054	76
77	5·404	5·281	5·163	5·050	4·836	77
78	5·145	5·033	4·925	4·821	4·624	78
79	4·891	4·788	4·689	4·594	4·413	79
80	4·647	4·553	4·463	4·376	4·210	80

For explanation see pp. 25–27

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE GOVERNMENT EXPERIENCE, 1883

FEMALES

Age	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	5%	Age
20	24·479	22·292	20·409	...	...	20
25	23·397	21·415	19·695	...	...	25
30	22·223	20·451	18·898	...	...	30
35	20·939	19·380	18·001	...	...	35
40	19·523	18·180	16·980	15·904	14·063	40
41	19·223	17·923	16·758	15·712	13·920	41
42	18·915	17·658	16·529	15·514	13·769	42
43	18·601	17·386	16·294	15·310	13·613	43
44	18·279	17·107	16·051	15·098	13·451	44
45	17·950	16·820	15·801	14·879	13·281	45
46	17·612	16·525	15·543	14·652	13·105	46
47	17·266	16·221	15·276	14·416	12·920	47
48	16·911	15·910	15·000	14·173	12·727	48
49	16·552	15·592	14·719	13·923	12·528	49
50	16·190	15·271	14·434	13·669	12·325	50
51	15·831	14·952	14·149	13·415	12·121	51
52	15·465	14·626	13·859	13·155	11·911	52
53	15·091	14·292	13·558	12·885	11·692	53
54	14·712	13·951	13·252	12·609	11·467	54
55	14·329	13·607	12·942	12·328	11·236	55
56	13·936	13·252	12·620	12·036	10·994	56
57	13·538	12·891	12·292	11·738	10·745	57
58	13·138	12·527	11·960	11·435	10·492	58
59	12·735	12·160	11·625	11·128	10·233	59
60	12·333	11·791	11·287	10·818	9·971	60
61	11·925	11·417	10·943	10·500	9·700	61
62	11·523	11·046	10·601	10·185	9·429	62
63	11·120	10·674	10·257	9·866	9·155	63
64	10·713	10·297	9·907	9·541	8·873	64
65	10·296	9·909	9·546	9·204	8·579	65
66	9·880	9·521	9·183	8·865	8·282	66
67	9·463	9·131	8·818	8·523	7·980	67
68	9·052	8·745	8·456	8·182	7·678	68
69	8·650	8·367	8·100	7·847	7·379	69
70	8·260	8·000	7·754	7·520	7·087	70
71	7·893	7·654	7·426	7·210	6·809	71
72	7·539	7·319	7·110	6·910	6·539	72
73	7·196	6·994	6·801	6·617	6·274	73
74	6·863	6·677	6·500	6·331	6·014	74
75	6·537	6·367	6·204	6·048	5·757	75
76	6·220	6·064	5·915	5·773	5·504	76
77	5·911	5·769	5·633	5·502	5·256	77
78	5·613	5·483	5·359	5·240	5·015	78
79	5·323	5·205	5·092	4·983	4·777	79
80	5·044	4·937	4·834	4·735	4·547	80

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE CARLISLE TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
0	·46641	·41224	·37700	·35251	·33421	·32015	0
1	·38587	·32483	·28595	·25974	·24079	·22674	1
2	·34463	·27976	·23891	·21179	·19258	·17867	2
3	·31021	·24173	·19886	·17065	·15097	·13696	3
4	·29267	·22187	·17757	·14857	·12847	·11430	4
5	·28079	·20800	·16238	·13255	·11198	·09748	5
6	·27633	·20211	·15548	·12491	·10387	·08904	6
7	·27572	·20038	·15286	·12163	·10007	·08489	7
8	·27764	·20137	.15305	·12117	·09916	·08363	8
9	·28125	·20419	·15514	·12264	·10021	·08430	9
10	·28606	·20833	·15862	·12558	·10263	·08637	10
11	·29145	·21313	·16281	·12921	·10577	·08919	11
12	·29681	·21789	·16695	·13277	·10891	·09193	12
13	·30222	·22272	·17114	·13640	·11211	·09474	13
14	·30771	·22762	·17543	·14013	·11538	·09763	14
15	·31315	·23249	·17967	·14381	·11859	·10045	15
16	·31833	·23706	·18362	·14715	·12147	·10289	16
17	·32334	·24150	·18733	·15026	·12408	·10511	17
18	·32841	·24590	·19110	·15343	·12677	·10733	18
19	·33362	·25052	·19505	·15677	·12958	·10970	19
20	·33901	·25532	·19919	·16028	·13259	·11222	20
21	·34455	·26031	·20352	·16402	·13579	·11496	21
22	·35037	·26562	·20819	·16809	·13933	·11807	22
23	·35637	·27115	·21310	·17240	·14312	·12141	23
24	·36252	·27690	·21824	·17692	·14711	·12496	24
25	·36808	·28289	·22367	·18174	·15136	·12874	25
26	·37548	·28901	·22919	·18672	·15581	·13267	26
27	·38218	·29538	·23500	·19198	·16052	·13689	27
28	·38890	·30176	·24086	·19725	·16529	·14119	28
29	·39531	·30781	·24633	·20211	·16962	·14504	29
30	·40129	·31338	·25129	·20642	·17335	·14830	30
31	·40734	·31903	·25633	·21083	·17714	·15155	31
32	·41357	·32491	·26162	·21547	·18120	·15504	32
33	·42010	·33113	·26729	·22051	·18564	·15889	33
34	·42694	·33771	·27333	·22594	·19049	·16319	34
35	·43399	·34457	·27967	·23172	·19565	·16778	35
36	·44117	·35170	·28633	·23783	·20115	·17274	36
37	·44870	·35901	·29319	·24411	·20684	·17793	37
38	·45624	·36649	·30024	·25062	·21279	·18326	38
39	·46393	·37416	·30752	·25736	·21894	·18889	39
40	·47156	·38178	·31477	·26404	·22509	·19444	40
41	·47893	·38911	·32167	·27038	·23085	·19963	41
42	·48621	·39636	·32852	·27666	·23648	·20467	42
43	·49352	·40364	·33538	·28294	·24210	·20971	43
44	·50108	·41120	·34257	·28957	·24805	·21504	44
45	·50885	·41905	·35010	·29653	·25440	·22074	45
46	·51694	·42734	·35810	·30400	·26127	·22696	46
47	·52542	·43607	·36662	·31204	·26873	·23378	47
48	·53439	·44542	·37586	·32087	·27697	·24141	48
49	·54406	·45565	·38610	·33077	·28639	·25030	49

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE CARLISLE TABLE OF MORTALITY

Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
50	·55429	·46658	·39714	·34164	·29679	·26022	50
51	·56509	·47824	·40905	·35347	·30831	·27126	51
52	·57598	·49003	·42124	·36558	·32015	·28267	52
53	·58699	·50211	·43371	·37804	·33238	·29459	53
54	·59812	·51436	·44648	·39089	·34507	·30696	54
55	·60948	·52694	·45967	·40431	·35842	·32007	55
56	·62096	·53977	·47319	·41812	·37229	·33370	56
57	·63260	·55286	·48710	·43243	·38668	·34800	57
58	·64413	·56591	·50105	·44687	·40121	·36252	58
59	·65512	·57833	·51433	·46062	·41514	·37644	59
60	·66531	·58987	·52667	·47336	·42803	·38926	60
61	·67436	·60007	·53752	·48445	·43922	·40036	61
62	·68325	·61012	·54824	·49549	·45027	·41133	62
63	·69222	·62033	·55914	·50676	·46165	·42259	63
64	·70157	·63103	·57067	·51875	·47389	·43481	64
65	·71112	·64203	·58262	·53126	·48664	·44763	65
66	·72103	·65347	·59510	·54440	·50012	·46133	66
67	·73122	·66539	·60824	·55832	·51451	·47593	67
68	·74168	·67770	·62186	·57287	·52969	·49141	68
69	·75246	·69043	·63605	·58809	·54565	·50793	69
70	·76340	·70349	·65067	·60389	·56234	·52519	70
71	·77465	·71701	·66595	·62053	·58000	·54371	71
72	·78525	·72979	·68043	·63638	·59687	·56134	72
73	·79483	·74136	·69357	·65075	·61225	·57748	73
74	·80334	·75161	·70524	·66355	·62586	·59178	74
75	·81033	·76004	·71481	·67396	·63698	·60333	75
76	·81717	·76831	·72419	·68421	·64791	·61481	76
77	·82352	·77597	·73291	·69377	·65805	·62548	77
78	·82996	·78378	·74181	·70351	·66851	·63645	78
79	·83713	·79256	·75191	·71472	·68055	·64919	79
80	·84374	·80066	·76119	·72502	·69167	·66096	80
81	·85090	·80950	·77148	·73645	·70410	·67422	81
82	·85734	·81745	·78067	·74675	·71529	·68615	82
83	·86392	·82561	·79019	·75740	·72693	·69859	83
84	·87027	·83352	·79948	·76781	·73838	·71089	84
85	·87682	·84173	·80910	·77874	·75042	·72393	85
86	·88253	·84891	·81762	·78836	·76108	·73548	86
87	·88719	·85477	·82452	·79628	·76978	·74496	87
88	·89002	·85833	·82870	·80101	·77502	·75067	88
89	·89325	·86242	·83357	·80658	·79078	·75733	89
90	·89809	·86861	·84103	·81513	·79196	·76793	90
91	·89861	·86929	·84186	·81615	·78634	·76926	91
92	·89582	·86569	·83752	·81111	·77973	·76311	92
93	·89261	·86156	·83248	·80528	·77633	·75578	93
94	·89118	·85962	·83005	·80234	·77512	·75185	94
95	·89057	·85868	·82876	·80064	·77424	·74941	95
96	·89212	·86047	·83071	·80268	·77626	·75126	96
97	·89633	·86569	·83676	·80936	·78352	·75904	97
98	·90132	·87184	·84391	·81734	·79216	·76822	98
99	·90880	·88127	·85500	·82996	·80609	·78326	99
100	·92185	·89797	·87505	·85306	·83193	·81163	100

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4%	$4\frac{1}{2}$%	5 %	Age
10	·32361	·26752	·22378	·18937	·16204	·14015	10
11	·32841	·27198	·22783	·19299	·16524	·14296	11
12	·33396	·27726	·23274	·19750	·16937	·14670	12
13	·34012	·28320	·23836	·20276	·17425	·15122	13
14	·34672	·28962	·24450	·20856	·17970	·15632	14
15	·35360	·29637	·25099	·21473	·18553	·16182	15
16	·36060	·30326	·25764	·22109	·19156	·16752	16
17	·36757	·31011	·26427	·22742	·19758	·17322	17
18	·37433	·31677	·27069	·23354	·20337	·17869	18
19	·38072	·32302	·27670	·23924	·20873	·18371	19
20	·38671	·32886	·28226	·24447	·21361	·18823	20
21	·39254	·33451	·28763	·24950	·21827	·19254	21
22	·39830	·34011	·29294	·25446	·22287	·19676	22
23	·40418	·34584	·29839	·25957	·22761	·20113	23
24	·41030	·35183	·30413	·26499	·23267	·20582	24
25	·41668	·35812	·31019	·27074	·23808	·21087	25
26	·42328	·36465	·31652	·27678	·24378	·21621	26
27	·43005	·37139	·32307	·28306	·24973	·22182	27
28	·43691	·37824	·32975	·28947	·25583	·22758	28
29	·44385	·38518	·33653	·29600	·26205	·23346	29
30	·45086	·39221	·34343	·30266	·26840	·23948	30
31	·45794	·39934	·35044	·30943	·27488	·24563	31
32	·46516	·40662	·35762	·31640	·28156	·25199	32
33	·47251	·41407	·36499	·32357	·28847	·25858	33
34	·48002	·42170	·37256	·33097	·29561	·26542	34
35	·48766	·42950	·38033	·33858	·30299	·27251	35
36	·49543	·43745	·38828	·34639	·31057	·27981	36
37	·50329	·44553	·39637	·35437	·31834	·28731	37
38	·51125	·45372	·40461	·36251	·32629	·29501	38
39	·51933	·46207	·41303	·37086	·33446	·30294	39
40	·52755	·47060	·42165	·37943	·34289	·31114	40
41	·53595	·47935	·43054	·38831	·35164	·31969	41
42	·54457	·48836	·43974	·39752	·36076	·32863	42
43	·55340	·49762	·44921	·40706	·37023	·33796	43
44	·56236	·50707	·45892	·41685	·37999	·34760	44
45	·57147	·51669	·46884	·42690	·39004	·35755	45
46	·58064	·52642	·47889	·43712	·40028	·36772	46
47	·58985	·53621	·48904	·44745	·41067	·37806	47
48	·59910	·54608	·49930	·45792	·42122	·38858	48
49	·60842	·55605	·50970	·46856	·43197	·39934	49
50	·61782	·56613	·52023	·47938	·44293	·41033	50
51	·62732	·57635	·53096	·49043	·45416	·42162	51
52	·63695	·58676	·54191	·50174	·46569	·43326	52
53	·64667	·59729	·55303	·51327	·47748	·44518	53
54	·65645	·60792	·56428	·52496	·48947	·45735	54

For explanation see pp. 27, 28

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	$4\frac{1}{2}$ %	5 %	Age
55	·66627	·61863	·57566	·53682	·50166	·46975	55
56	·67612	·62939	·58712	·54881	·51401	·48235	56
57	·68597	·64020	·59866	·56090	·52651	·49513	57
58	·69583	·65103	·61026	·57309	·53915	·50809	58
59	·70568	·66190	·62193	·58539	·55193	·52122	59
60	·71548	·67274	·63361	·59773	·56478	·53446	60
61	·72522	·68353	·64526	·61007	·57766	·54777	61
62	·73485	·69424	·65685	·62237	·59053	·56109	62
63	·74437	·70484	·66835	·63461	·60337	·57441	63
64	·75375	·71532	·67974	·64675	·61613	·58767	64
65	·76302	·72569	·69104	·65883	·62886	·60092	65
66	·77220	·73600	·70230	·67089	·64159	·61421	66
67	·78132	·74626	·71354	·68297	·65437	·62758	67
68	·79039	·75650	·72478	·69507	·66721	·64105	68
69	·79948	·76678	·73610	·70729	·68021	·65473	69
70	·80849	·77700	·74738	·71950	·69323	·66845	70
71	·81734	·78706	·75852	·73159	·70615	·68210	71
72	·82593	·79685	·76937	·74339	·71879	·69549	72
73	·83415	·80623	·77980	·75475	·73098	·70841	73
74	·84190	·81510	·78967	·76551	·74254	·72069	74
75	·84919	·82345	·79897	·77567	·75347	·73231	75
76	·85628	·83159	·80806	·78561	·76418	·74372	76
77	·86313	·83946	·81686	·79525	·77459	·75482	77
78	·86978	·84711	·82543	·80466	·78476	·76569	78
79	·87628	·85461	·83384	·81392	·79479	·77643	79
80	·88256	·86187	·84200	·82291	·80455	·78690	80
81	·88850	·86874	·84974	·83145	·81383	·79686	81
82	·89394	·87506	·85686	·83931	·82238	·80605	82
83	·89899	·88090	·86345	·84659	·83031	·81458	83
84	·90353	·88617	·86940	·85317	·83747	·82228	84
85	·90778	·89110	·87496	·85932	·84416	·82948	85
86	·91200	·89601	·88050	·86545	·85084	·83667	86
87	·91645	·90118	·88635	·87194	·85792	·84430	87
88	·92113	·90663	·89252	·87878	·86541	·85239	88
89	·92659	·91301	·89977	·88686	·87427	·86198	89
90	·93272	·92020	·90796	·89600	·88432	·87290	90
91	·93899	·92756	·91637	·90541	·89468	·88417	91
92	·94538	·93508	·92498	·91507	·90534	·89579	92
93	·95224	·94317	·93426	·92549	·91687	·90840	93
94	·95899	·95116	·94344	·93583	·92834	·92096	94
95	·96542	·95878	·95222	·94575	·93934	·93304	95
96	·97124	·96568	·96018	·95475	·94933	·94405	96
97	·97561	·97087	·96618	·96154	·95694	·95238	97

ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	$4\frac{1}{2}$ %	5 %	Age
10	·01167	·01064	·00975	·00899	·00833	·00776	10
11	·01193	·01088	·00998	·00920	·00852	·00794	11
12	·01233	·01117	·01026	·00947	·00878	·00819	12
13	·01257	·01151	·01058	·00978	·00909	·00848	13
14	·01295	·01188	·01094	·01014	·00943	·00882	14
15	·01334	·01227	·01133	·01052	·00981	·00919	15
16	·01376	·01268	·01174	·01092	·01020	·00958	16
17	·01418	·01309	·01215	·01132	·01060	·00998	17
18	·01459	·01350	·01255	·01172	·01099	·01036	18
19	·01499	·01390	·01294	·01210	·01136	·01072	19
20	·01538	·01427	·01330	·01245	·01170	·01104	20
21	·01576	·01464	·01365	·01279	·01202	·01135	21
22	·01615	·01501	·01401	·01313	·01235	·01166	22
23	·01655	·01540	·01438	·01348	·01269	·01199	23
24	·01697	·01581	·01478	·01387	·01306	·01234	24
25	·01742	·01625	·01521	·01428	·01346	·01272	25
26	·01790	·01672	·01566	·01472	·01388	·01314	26
27	·01840	·01721	·01614	·01519	·01433	·01357	27
28	·01893	·01772	·01664	·01567	·01480	·01403	28
29	·01947	·01825	·01715	·01617	·01529	·01450	29
30	·02003	·01880	·01769	·01669	·01580	·01499	30
31	·02061	·01936	·01824	·01723	·01632	·01550	31
32	·02121	·01996	·01883	·01780	·01688	·01604	32
33	·02185	·02058	·01944	·01840	·01746	·01661	33
34	·02252	·02124	·02008	·01903	·01807	·01721	34
35	·02322	·02193	·02076	·01969	·01872	·01784	35
36	·02395	·02265	·02146	·02038	·01940	·01850	36
37	·02471	·02340	·02221	·02111	·02011	·01920	37
38	·02551	·02419	·02298	·02187	·02086	·01993	38
39	·02635	·02502	·02380	·02267	·02164	·02069	39
40	·02723	·02589	·02465	·02352	·02247	·02151	40
41	·02817	·02682	·02557	·02442	·02336	·02238	41
42	·02917	·02780	·02654	·02538	·02430	·02331	42
43	·03022	·02885	·02758	·02640	·02532	·02431	43
44	·03134	·02996	·02868	·02749	·02639	·02537	44
45	·03253	·03114	·02985	·02865	·02754	·02650	45
46	·03377	·03238	·03108	·02987	·02874	·02769	46
47	·03508	·03367	·03237	·03115	·03001	·02895	47
48	·03645	·03504	·03372	·03249	·03134	·03026	48
49	·03790	·03648	·03515	·03391	·03275	·03166	49
50	·03943	·03801	·03667	·03542	·03424	·03314	50
51	·04106	·03963	·03828	·03702	·03583	·03471	51
52	·04279	·04136	·04000	·03873	·03753	·03640	52
53	·04464	·04320	·04184	·04056	·03935	·03821	53
54	·04661	·04516	·04379	·04250	·04129	·04013	54

For explanation see pp. 27, 28

Age	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	$4\frac{1}{2}\%$	5%	Age
	ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE						

Age	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	$4\frac{1}{2}\%$	5%	Age
55	·04870	·04725	·04588	·04458	·04335	·04219	55
56	·05092	·04946	·04809	·04678	·04555	·04437	56
57	·05328	·05182	·05044	·04913	·04788	·04670	57
58	·05580	·05434	·05295	·05163	·05038	·04918	58
59	·05848	·05702	·05563	·05431	·05304	·05184	59
60	·06134	·05987	·05848	·05715	·05588	·05467	60
61	·06437	·06291	·06151	·06018	·05890	·05768	61
62	·06760	·06613	·06473	·06339	·06211	·06087	62
63	·07102	·06956	·06815	·06680	·06551	·06427	63
64	·07466	·07319	·07177	·07042	·06912	·06787	64
65	·07853	·07705	·07564	·07427	·07296	·07170	65
66	·08268	·08120	·07978	·07841	·07709	·07581	66
67	·08714	·08566	·08423	·08286	·08153	·08025	67
68	·09197	·09049	·08906	·08767	·08634	·08504	68
69	·09725	·09576	·09433	·09294	·09160	·09030	69
70	·10297	·10148	·10005	·09866	·09731	·09601	70
71	·10914	·10766	·10622	·10483	·10348	·10218	71
72	·11572	·11425	·11281	·11142	·11007	·11876	72
73	·12267	·12119	·11976	·11836	·11701	·11569	73
74	·12988	·12840	·12696	·12556	·12420	·12287	74
75	·13734	·13585	·13440	·13299	·13161	·13027	75
76	·14532	·14382	·14236	·14094	·13954	·13819	76
77	·15382	·15230	·15083	·14939	·14798	·14660	77
78	·16291	·16138	·15989	·15843	·15701	·15561	78
79	·17275	·17121	·16970	·16823	·16679	·16538	79
80	·18329	·18174	·18022	·17873	·17727	·17584	80
81	·19435	·19277	·19123	·18972	·18824	·18679	81
82	·20559	·20399	·20242	·20089	·19938	·19790	82
83	·21707	·21543	·21383	·21225	·21071	·20920	83
84	·22844	·22676	·22510	·22348	·22189	·22032	84
85	·24009	·23834	·23662	·23493	·23327	·23163	85
86	·25279	·25096	·24916	·24739	·24565	·24393	86
87	·26755	·26563	·26373	·26187	·26003	·25823	87
88	·28485	·28282	·28081	·27884	·27689	·27498	88
89	·30786	·30570	·30358	·30149	·29943	·29740	89
90	·33813	·33585	·33360	·33138	·32919	·32703	90
91	·37537	·37294	·37053	·36816	·36582	·36351	91
92	·42217	·41954	·41694	·41438	·41185	·40935	92
93	·48624	·48338	·48055	·47776	·47499	·47226	93
94	·57035	·56719	·56405	·56095	·55789	·55486	94
95	·68105	·67748	·67394	·67044	·66696	·66354	95
96	·82364	·81954	·81546	·81144	·80742	·80350	96
97	·97561	·97087	·96618	·96154	·95694	·95238	97

PRESENT VALUE OF REVERSION TO A PERPETUITY AT DEATH OF A PERSON OF AGE STATED. GOVERNMENT EXPERIENCE, 1883

MALES

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	5 %	Age
20	17·566	12·772	9·635	...	...	20
25	18·718	13·732	10·441	...	...	25
30	19·921	14·745	11·300	...	...	30
35	21·178	15·818	12·218	...	...	35
40	22·499	16·957	13·206	10·546	7·117	40
41	22·773	17·195	13·413	10·727	7·257	41
42	23·050	17·436	13·624	10·912	7·401	42
43	23·330	17·680	13·838	11·101	7·549	43
44	23·613	17·929	14·057	11·293	7·700	44
45	23·901	18·181	14·279	11·490	7·855	45
46	24·193	18·438	14·506	11·691	8·014	46
47	24·489	18·700	14·738	11·897	8·178	47
48	24·791	18·967	14·976	12·109	8·347	48
49	25·100	19·242	15·220	12·327	8·523	49
50	25·412	19·520	15·468	12·550	8·702	50
51	25·732	19·807	15·726	12·781	8·890	51
52	26·059	20·100	15·989	13·018	9·084	52
53	26·392	20·400	16·260	13·263	9·286	53
54	26·733	20·708	16·539	13·516	9·494	54
55	27·081	21·024	16·825	13·776	9·711	55
56	27·437	21·347	17·120	14·045	9·937	56
57	27·802	21·680	17·425	14·324	10·172	57
58	28·177	22·023	17·739	14·613	10·417	58
59	28·561	22·377	18·065	14·914	10·674	59
60	28·946	22·732	18·393	15·217	10·935	60
61	29·322	23·079	18·714	15·515	11·192	61
62	29·686	23·417	19·028	15·806	11·444	62
63	30·052	23·756	19·343	16·100	11·700	63
64	30·414	24·094	19·658	16·395	11·959	64
65	30·775	24·431	19·974	16·691	12·219	65
66	31·125	24·760	20·282	16·980	12·475	66
67	31·467	25·081	20·584	17·264	12·727	67
68	31·804	25·397	20·882	17·545	12·977	68
69	32·142	25·716	21·183	17·829	13·232	69
70	32·479	26·034	21·484	18·114	13·488	70
71	32·809	26·347	21·781	18·396	13·743	71
72	33·136	26·658	22·076	18·677	13·997	72
73	33·454	26·960	22·363	18·950	14·246	73
74	33·755	27·247	22·637	19·212	14·485	74
75	34·045	27·524	22·902	19·465	14·717	75
76	34·328	27·795	23·161	19·714	14·946	76
77	34·596	28·052	23·408	19·950	15·164	77
78	34·855	28·300	23·646	20·179	15·376	78
79	35·109	28·545	23·882	20·406	15·587	79
80	35·353	28·780	24·108	20·624	15·790	80

For explanation see p. 28

PRESENT VALUE OF REVERSION TO A PERPETUITY AT DEATH OF A PERSON OF AGE STATED. GOVERNMENT EXPERIENCE, 1883

FEMALES

Age	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	5 %	Age
20	15·521	11·041	8·162	...	...	20
25	16·603	11·918	8·876	...	...	25
30	17·777	12·882	9·673	...	...	30
35	19·061	13·953	10·570	...	...	35
40	20·477	15·153	11·591	9·096	5·937	40
41	20·777	15·411	11·813	9·288	6·080	41
42	21·085	15·676	12·042	9·486	6·231	42
43	21·399	15·947	12·277	9·690	6·387	43
44	21·721	16·226	12·520	9·902	6·549	44
45	22·050	16·513	12·770	10·121	6·719	45
46	22·388	16·808	13·028	10·348	6·895	46
47	22·734	17·112	13·295	10·584	7·080	47
48	23·089	17·423	13·571	10·827	7·273	48
49	23·448	17·741	13·852	11·077	7·472	49
50	23·810	18·063	14·137	11·331	7·675	50
51	24·169	18·382	14·422	11·585	7·879	51
52	24·535	18·707	14·712	11·845	8·089	52
53	24·909	19·041	15·013	12·115	8·308	53
54	25·288	19·382	15·319	12·391	8·533	54
55	25·671	19·726	15·629	12·672	8·764	55
56	26·064	20·081	15·951	12·964	9·006	56
57	26·462	20·443	16·279	13·262	9·255	57
58	26·862	20·806	16·611	13·565	9·508	58
59	27·265	21·173	16·946	13·872	9·767	59
60	27·667	21·542	17·284	14·182	10·029	60
61	28·075	21·916	17·628	14·500	10·300	61
62	28·477	22·287	17·970	14·815	10·571	62
63	28·880	22·659	18·314	15·134	10·845	63
64	29·287	23·036	18·664	15·459	11·127	64
65	29·704	23·424	19·025	15·796	11·421	65
66	30·120	23·812	19·388	16·135	11·718	66
67	30·537	24·202	19·753	16·477	12·020	67
68	30·948	24·588	20·115	16·818	12·322	68
69	31·350	24·966	20·471	17·153	12·621	69
70	31·740	25·333	20·817	17·480	12·913	70
71	32·107	25·679	21·145	17·790	13·191	71
72	32·461	26·014	21·461	18·090	13·461	72
73	32·804	26·339	21·770	18·383	13·726	73
74	33·137	26·655	22·071	18·669	13·986	74
75	33·463	26·967	22·367	18·952	14·243	75
76	33·780	27·269	22·656	19·227	14·496	76
77	34·089	27·564	22·938	19·498	14·744	77
78	34·387	27·850	23·212	19·760	14·985	78
79	34·677	28·128	23·479	20·017	15·223	79
80	34·956	28·396	23·737	20·265	15·453	80

				Present Value of Reversion to a Perpetuity at Death of a Person of Age stated. NORTHAMPTON TABLE					

Age	3 %	4 %	5 %	6 %	Age
5	12·860	7·752	5·173	3·705	5
10	12·670	7·477	4·861	3·382	10
15	13·676	8·209	5·412	3·810	15
20	14·695	8·967	5·993	4·269	20
25	15·519	9·562	6·433	4·604	25
30	16·411	10·219	6·928	4·985	30
35	17·395	10·961	7·498	5·431	35
40	18·485	11·803	8·163	5·962	40
45	19·641	12·717	8·895	6·557	45
50	20·897	13·736	9·731	7·250	50
55	22·183	14·799	10·618	7·997	55
60	23·556	15·961	11·608	8·847	60
65	25·029	17·239	12·724	9·826	65
70	26·599	18·639	13·977	10·951	70
75	28·134	20·038	15·256	12·125	75
80	29·552	21·357	16·485	13·273	80
85	30·713	22·457	17·529	14·265	85
90	31·539	23·242	18·277	14·978	90
95	33·091	24·760	19·762	16·431	95

CARLISLE TABLE

Age	3 %	4 %	5 %	6 %	Age
5	9·640	5·406	3·410	2·342	5
10	9·821	5·415	3·331	2·219	10
15	10·751	6·044	3·773	2·541	15
20	11·639	6·637	4·183	2·832	20
25	12·668	7·355	4·697	3·211	25
30	13·777	8·148	5·277	3·647	30
35	14·900	8·959	5·873	4·094	35
40	16·190	9·926	6·610	4·665	40
45	17·470	10·896	7·352	5·239	45
50	19·030	12·131	8·340	6·036	50
55	20·925	13·700	9·653	7·143	55
60	22·842	15·337	11·060	8·363	60
65	24·416	16·693	12·235	9·386	65
70	26·210	18·291	13·664	10·669	70
75	27·821	19·761	15·011	11·907	75
80	28·968	20·817	15·985	12·809	80
85	30·104	21·885	16·991	13·758	85
90	30·834	22·584	17·661	14·401	90
95	30·576	22·326	17·404	14·145	95

T A B L E S

MORTALITY OF TWO AND THREE LIVES

AND

INTEREST

PREMIUM CONVERSION TABLES

(155)

I

Value of an Annuity for the Joint Continuance of Two Lives according to the NORTHAMPTON TABLE

Ages	3 %	4 %	5 %	Ages	3 %	4 %	5 %
15 15	15·220	13·411	11·964	35 45	10·622	9·706	8·921
15 20	14·660	12·961	11·585	35 50	9·912	9·110	8·415
15 25	14·230	12·630	11·324	35 55	9·131	8·448	7·849
15 30	13·734	12·246	11·021	35 60	8·227	7·669	7·174
15 35	13·151	11·787	10·655	35 65	7·177	6·747	6·360
15 40	12·459	11·234	10·205	35 70	5·971	5·663	5·382
15 45	11·687	10·607	9·690	35 75	4·720	4·516	4·327
15 50	10·799	9·872	9·076	35 80	3·506	3·383	3·268
15 55	9·851	9·077	8·403	40 40	10·764	9·820	9·016
15 60	8·790	8·170	7·622	40 45	10·236	9·381	8·643
15 65	7·597	7·127	6·705	40 50	9·590	8·834	8·177
15 70	6·264	5·933	5·631	40 55	8·870	8·221	7·651
15 75	4·911	4·695	4·495	40 60	8·025	7·490	7·015
15 80	3·621	3·492	3·372	40 65	7·030	6·614	6·240
20 20	14·133	12·535	11·232	40 70	5·871	5·571	5·298
20 25	13·741	12·229	10·989	40 75	4·656	4·457	4·272
20 30	13·286	11·873	10·707	40 80	3·469	3·349	3·236
20 35	12·744	11·445	10·363	45 45	9·776	8·990	8·312
20 40	12·096	10·924	9·937	45 50	9·204	8·503	7·891
20 45	11·367	10·330	9·448	45 55	8·557	7·948	7·411
20 50	10·523	9·630	8·861	45 60	7·781	7·274	6·822
20 55	9·617	8·869	8·216	45 65	6·850	6·453	6·094
20 60	8·597	7·995	7·463	45 70	5·749	5·460	5·195
20 65	7·444	6·986	6·576	45 75	4·580	4·386	4·206
20 70	6·149	5·826	5·532	45 80	3·426	3·308	3·197
20 75	4·831	4·619	4·424	50 50	8·714	8·081	7·522
20 80	3·569	3·443	3·325	50 55	8·152	7·593	7·098
25 25	13·383	11·944	10·764	50 60	7·461	6·989	6·568
25 30	12·966	11·618	10·499	50 65	6·611	6·236	5·897
25 35	12·463	11·217	10·175	50 70	5·582	5·306	5·054
25 40	11·854	10·725	9·771	50 75	4·472	4·285	4·112
25 45	11·164	10·160	9·304	50 80	3·362	3·247	3·140
25 50	10·356	9·488	8·739	55 55	7·681	7·179	6·735
25 55	9·484	8·754	8·116	55 60	7·088	6·659	6·272
25 60	8·495	7·906	7·383	55 65	6·334	5·986	5·671
25 65	7·370	6·920	6·515	55 70	5·391	5·132	4·893
25 70	6·099	5·780	5·489	55 75	4·350	4·171	4·006
25 75	4·799	4·589	4·396	55 80	3·291	3·180	3·076
25 80	3·550	3·425	3·308	60 60	6·606	6·226	5·888
30 30	12·589	11·313	10·255	60 65	5·970	5·658	5·372
30 35	12·131	10·948	9·954	60 70	5·139	4·900	4·580
30 40	11·568	10·490	9·576	60 75	4·189	4·021	3·866
30 45	10·923	9·959	9·135	60 80	3·197	3·092	2·992
30 50	10·160	9·321	8·596	65 65	5·471	5·201	4·960
30 55	9·329	8·619	7·999	65 70	4·783	4·573	4·378
30 60	8·378	7·802	7·292	65 75	3·958	3·806	3·665
30 65	7·286	6·844	6·447	65 80	3·063	2·965	2·873
30 70	6·043	5·729	5·442	70 70	4·261	4·087	3·930
30 75	4·764	4·557	4·365	70 75	3·599	3·471	3·347
30 80	3·530	3·406	3·290	70 80	2·843	2·757	2·675
35 35	11·722	10·612	9·680	75 75	3·114	3·015	2·917
35 40	11·213	10·196	9·331	75 80	2·526	2·448	2·381

For explanation see pp. 29–31

Value of an Annuity for the Joint Continuance of Two Lives according to the CARLISLE TABLE

Ages		3 %	Ages		3 %	Ages		3 %	Ages		3 %
5	5	19·815	15	85	3·149	35	40	14·048	55	70	6·019
5	10	19·873	15	90	2·441	35	45	13·331	55	75	4·813
5	15	19·288	15	95	2·699	35	50	12·313	55	80	3·920
5	20	18·723	15	100	1·663	35	55	10·919	55	85	2·961
5	25	18·016	20	20	17·992	35	60	9·410	55	90	2·307
5	30	17·218	20	25	17·420	35	65	8·140	55	95	2·575
5	35	16·390	20	30	16·748	35	70	6·608	55	100	1·625
5	40	15·391	20	35	16·031	35	75	5·179	60	60	7·295
5	45	14·381	20	40	15·131	35	80	4·148	60	65	6·589
5	50	13·092	20	45	14·207	35	85	3·095	60	70	5·565
5	55	11·463	20	50	12·995	35	90	2·403	60	75	4·497
5	60	9·773	20	55	11·428	35	95	2·663	60	80	3·695
5	65	8·372	20	60	9·782	35	100	1·650	60	85	2·812
5	70	6·737	20	65	8·411	40	40	13·482	60	90	2·199
5	75	5·244	20	70	6·790	40	45	12·869	60	95	2·458
5	80	4·175	20	75	5·298	40	50	11·955	60	100	1·577
5	85	3·102	20	80	4·225	40	55	10·658	65	65	6·047
5	90	2·405	20	85	3·143	40	60	9·224	65	70	5·193
5	95	2·658	20	90	2·437	40	65	8·006	65	75	4·256
5	100	1·637	20	95	2·696	40	70	6·515	65	80	3·542
10	10	19·964	20	100	1·661	40	75	5·115	65	85	2·719
10	15	19·409	25	25	16·915	40	80	4·102	65	90	2·131
10	20	18·872	25	30	16·311	40	85	3·065	65	95	2·398
10	25	18·189	25	35	15·660	40	90	2·380	65	100	1·555
10	30	17·410	25	40	14·823	40	95	2·639	70	70	4·556
10	35	16·596	25	45	13·954	40	100	1·641	70	75	3·804
10	40	15·605	25	50	12·793	45	45	12·371	70	80	3·228
10	45	14·601	25	55	11·274	45	50	11·580	70	85	2·522
10	50	13·309	25	60	9·668	45	55	10·400	70	90	1·987
10	55	11·667	25	65	8·329	45	60	9·063	70	95	2·248
10	60	9·957	25	70	6·736	45	65	7·910	70	100	1·513
10	65	8·537	25	75	5·263	45	70	6·465	75	75	3·231
10	70	6·874	25	80	4·203	45	75	5·089	75	80	2·790
10	75	5·353	25	85	3·130	45	80	4·087	75	85	2·217
10	80	4·262	25	90	2·428	45	85	3·056	75	90	1·758
10	85	3·167	25	95	2·688	45	90	2·375	75	95	1·993
10	90	2·454	25	100	1·660	45	95	2·633	75	100	1·392
10	95	2·714	30	30	15·783	45	100	1·637	80	80	2·459
10	100	1·668	30	35	15·209	50	50	10·942	80	85	1·993
15	15	18·908	30	40	14·449	50	55	9·924	80	90	1·589
15	20	18·423	30	45	13·649	50	60	8·729	80	95	1·806
15	25	17·793	30	50	12·551	50	65	7·691	80	100	1·316
15	30	17·064	30	55	11·089	50	70	6·338	85	85	1·657
15	35	16·295	30	60	9·529	50	75	5·022	85	90	1·335
15	40	15·348	30	65	8·224	50	80	4·054	85	95	1·509
15	45	14·382	30	70	6·662	50	85	3·040	85	100	1·170
15	50	13·131	30	75	5·213	50	90	2·365	90	90	1·088
15	55	11·528	30	80	4·168	50	95	2·629	90	95	1·217
15	60	9·852	30	85	3·107	50	100	1·639	90	100	·979
15	65	8·458	30	90	2·411	55	55	9·103	95	95	1·383
15	70	6·818	30	95	2·670	55	60	8·098	95	100	1·072
15	75	5·314	30	100	1·651	55	65	7·219	100	100	·991
15	80	4·235	35	35	14·720						

For explanation see pp. 29–31

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Value of an Annuity for the Joint Continuance of Two Lives
according to the
GOVERNMENT EXPERIENCE TABLE, 1883

	TWO MALES				TWO FEMALES		
Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %
20 20	17·438	16·239	15·174	20 20	19·906	18·384	17·047
20 25	16·847	15·726	14·727	20 25	19·348	17·915	16·651
20 30	16·186	15·151	14·224	20 30	18·675	17·347	16·169
20 35	15·445	14·505	13·658	20 35	17·867	16·661	15·584
20 40	14·617	13·778	13·018	20 40	16·905	15·835	14·872
20 45	13·687	12·957	12·289	20 45	15·760	14·837	14·000
20 50	12·632	12·014	11·444	20 50	14·394	13·625	12·922
20 55	11·409	10·907	10·441	20 55	12·856	12·241	11·673
20 60	9·954	9·569	9·209	20 60	11·184	10·714	10·276
20 65	8·204	7·931	7·673	20 65	9·335	8·998	8·680
20 70	6·584	6·399	6·222	20 70	7·503	7·275	7·058
20 75	5·141	5·021	4·905	20 75	5·742	5·598	5·460
20 80	3·833	3·759	3·688	20 80	4·263	4·177	4·093
20 85	2·786	2·743	2·701	20 85	3·002	2·953	2·906
20 90	1·958	1·933	1·910	20 90	2·041	2·015	1·990
20 95	1·125	1·115	1·105	20 95	1·266	1·255	1·243
25 25	16·321	15·265	14·322	25 25	18·866	17·505	16·300
25 30	15·724	14·743	13·862	25 30	18·271	16·999	15·868
25 35	15·046	14·149	13·339	25 35	17·537	16·373	15·332
25 40	14·277	13·472	12·741	25 40	16·641	15·601	14·664
25 45	13·403	12·697	12·052	25 45	15·552	14·650	13·831
25 50	12·399	11·799	11·247	25 50	14·233	13·479	12·789
25 55	11·226	10·737	10·283	25 55	12·735	12·129	11·570
25 60	9·817	9·441	9·089	25 60	11·096	10·631	10·198
25 65	8·110	7·842	7·589	25 65	9·274	8·940	8·625
25 70	6·522	6·340	6·165	25 70	7·462	7·236	7·021
25 75	5·102	4·983	4·869	25 75	5·717	5·574	5·437
25 80	3·809	3·737	3·666	25 80	4·248	4·163	4·080
25 85	2·773	2·730	2·688	25 85	2·994	2·945	2·899
25 90	1·950	1·926	1·903	25 90	2·037	2·011	1·986
25 95	1·122	1·112	1·102	25 95	1·265	1·253	1·241
30 30	15·198	14·279	13·451	30 30	17·763	16·564	15·493
30 35	14·593	13·745	12·977	30 35	17·121	16·011	15·016
30 40	13·893	13·126	12·428	30 40	16·310	15·309	14·406
30 45	13·083	12·406	11·786	30 45	15·297	14·422	13·627
30 50	12·139	11·560	11·026	30 50	14·042	13·306	12·631
30 55	11·022	10·547	10·106	30 55	12·595	12·000	11·451
30 60	9·665	9·298	8·954	30 60	10·996	10·538	10·112
30 65	8·005	7·743	7·495	30 65	9·206	8·876	8·565
30 70	6·452	6·273	6·101	30 70	7·418	7·194	6·981
30 75	5·058	4·940	4·828	30 75	5·689	5·547	5·412
30 80	3·783	3·711	3·641	30 80	4·232	4·147	4·065
30 85	2·758	2·715	2·674	30 85	2·985	2·937	2·890
30 90	1·942	1·918	1·895	30 90	2·032	2·006	1·981
30 95	1·118	1·109	1·099	30 95	1·262	1·251	1·239

For explanation see pp. 29–31

Value of an Annuity for the Joint Continuance of Two Lives
according to the
GOVERNMENT EXPERIENCE TABLE, 1883

	TWO MALES				TWO FEMALES		
Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %
35 35	14·067	13·277	12·559	35 35	16·582	15·543	14·608
35 40	13·449	12·727	12·068	35 40	15·878	14·929	14·071
35 45	12·718	12·074	11·483	35 45	14·965	14·127	13·363
35 50	11·845	11·290	10·777	35 50	13·797	13·084	12·431
35 55	10·792	10·334	9·907	35 55	12·420	11·841	11·304
35 60	9·494	9·138	8·804	35 60	10·876	10·427	10·008
35 65	7·886	7·630	7·389	35 65	9·127	8·801	8·495
35 70	6·373	6·197	6·029	35 70	7·368	7·146	6·936
35 75	5·007	4·892	4·781	35 75	5·659	5·518	5·383
35 80	3·753	3·682	3·613	35 80	4·214	4·130	4·048
35 85	2·740	2·698	2·657	35 85	2·975	2·927	2·881
35 90	1·932	1·909	1·886	35 90	2·027	2·001	1·976
35 95	1·114	1·105	1·095	35 95	1·260	1·248	1·237
40 40	12·923	12·254	11·642	40 40	15·296	14·418	13·619
40 45	12·285	11·681	11·126	40 45	14·510	13·721	13·001
40 50	11·501	10·975	10·487	40 50	13·459	12·781	12·156
40 55	10·529	10·090	9·680	40 55	12·183	11·623	11·105
40 60	9·301	8·957	8·634	40 60	10·716	10·279	9·871
40 65	7·753	7·504	7·269	40 65	9·025	8·706	8·406
40 70	6·284	6·112	5·948	40 70	7·306	7·088	6·880
40 75	4·951	4·837	4·728	40 75	5·623	5·484	5·351
40 80	3·718	3·648	3·581	40 80	4·194	4·110	4·029
40 85	2·720	2·679	2·638	40 85	2·964	2·917	2·871
40 90	1·921	1·898	1·875	40 90	2·021	1·995	1·971
40 95	1·110	1·100	1·091	40 95	1·258	1·246	1·235
45 45	11·753	11·200	10·689	45 45	13·869	13·149	12·489
45 50	11·079	10·589	10·134	45 50	12·969	12·338	11·757
45 55	10·210	9·795	9·407	45 55	11·830	11·302	10·812
45 60	9·074	8·744	8·434	45 60	10·477	10·059	9·667
45 65	7·600	7·360	7·132	45 65	8·875	8·565	8·274
45 70	6·184	6·016	5·856	45 70	7·217	7·003	6·801
45 75	4·887	4·776	4·669	45 75	5·574	5·437	5·306
45 80	3·680	3·611	3·544	45 80	4·168	4·085	4·005
45 85	2·698	2·657	2·617	45 85	2·951	2·904	2·858
45 90	1·909	1·886	1·863	45 90	2·014	1·989	1·964
45 95	1·105	1·095	1·086	45 95	1·255	1·243	1·232
50 50	10·532	10·088	9·675	50 50	12·245	11·680	11·157
50 55	9·795	9·412	9·053	50 55	11·284	10·801	10·351
50 60	8·781	8·471	8·179	50 60	10·092	9·701	9·335
50 65	7·411	7·181	6·963	50 65	8·622	8·328	8·052
50 70	6·064	5·902	5·747	50 70	7·061	6·856	6·660
50 75	4·813	4·705	4·601	50 75	5·484	5·351	5·223
50 80	3·636	3·568	3·503	50 80	4·119	4·037	3·959
50 85	2·672	2·632	2·592	50 85	2·926	2·880	2·835
50 90	1·895	1·872	1·849	50 90	2·003	1·978	1·953

| Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883 | | | | | | | |
| TWO MALES | | | | TWO FEMALES | | | |
Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %
50 95	1·099	1·090	1·080	50 95	1·250	1·239	1·228
55 55	9·212	8·873	8·555	55 55	10·523	10·100	9·704
55 60	8·361	8·080	7·814	55 60	9·534	9·182	8·852
55 65	7·138	6·925	6·722	55 65	8·245	7·974	7·718
55 70	5·898	5·744	5·597	55 70	6·824	6·630	6·446
55 75	4·717	4·612	4·512	55 75	5·343	5·216	5·094
55 80	3·582	3·516	3·453	55 80	4·038	3·959	3·883
55 85	2·642	2·603	2·564	55 85	2·882	2·837	2·793
55 90	1·879	1·856	1·834	55 90	1·979	1·954	1·930
55 95	1·093	1·083	1·074	55 95	1·239	1·228	1·217
60 60	7·705	7·465	7·238	60 60	8·771	8·471	8·187
60 65	6·685	6·497	6·319	60 65	7·710	7·472	7·245
60 70	5·608	5·468	5·335	60 70	6·481	6·306	6·138
60 75	4·546	4·429	4·356	60 75	5·143	5·025	4·910
60 80	3·491	3·428	3·367	60 80	3·929	3·854	3·781
60 85	2·596	2·558	2·520	60 85	2·826	2·783	2·740
60 90	1·857	1·835	1·813	60 90	1·952	1·928	1·904
60 95	1·085	1·076	1·066	60 95	1·229	1·217	1·206
65 65	5·911	5·759	5·614	65 65	6·910	6·713	6·526
65 70	5·053	4·936	4·825	65 70	5·927	5·777	5·633
65 75	4·175	4·091	4·010	65 75	4·793	4·688	4·587
65 80	3·262	3·206	3·152	65 80	3·722	3·654	3·587
65 85	2·463	2·428	2·394	65 85	2·713	2·673	2·633
65 90	1·786	1·765	1·745	65 90	1·893	1·870	1·847
65 95	1·058	1·049	1·041	65 95	1·203	1·192	1·181
70 70	4·407	4·314	4·225	70 70	5·206	5·086	4·971
70 75	3·719	3·649	3·582	70 75	4·313	4·226	4·141
70 80	2·963	2·915	2·869	70 80	3·427	3·367	3·310
70 85	2·276	2·245	2·215	70 85	2·549	2·512	2·476
70 90	1·676	1·657	1·638	70 90	1·806	1·785	1·764
70 95	1·011	1·002	·994	70 95	1·165	1·154	1·144
75 75	3·215	3·161	3·108	75 75	3·671	3·604	3·539
75 80	2·625	2·586	2·548	75 80	2·997	2·949	2·903
75 85	2·063	2·036	2·010	75 85	2·287	2·256	2·226
75 90	1·551	1·534	1·518	75 90	1·657	1·639	1·620
75 95	·958	·950	·942	75 95	1·094	1·084	1·075
80 80	2·199	2·169	2·141	80 80	2·523	2·486	2·451
80 85	1·773	1·752	1·732	80 85	1·985	1·960	1·936
80 90	1·367	1·353	1·340	80 90	1·478	1·462	1·447
80 95	·872	·865	·858	80 95	1·004	·995	·987
85 85	1·469	1·453	1·438	85 85	1·617	1·599	1·581
85 90	1·164	1·153	1·143	85 90	1·243	1·231	1·219
85 95	·772	·766	·760	85 95	·877	·870	·863
90 90	·949	·941	·932	90 90	·988	·979	·970
90 95	·655	·651	·646	90 95	·725	·719	·714
95 95	·485	·482	·478	95 95	·557	·554	·550

For explanation see pp. 29–31

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883. MALE AND FEMALE							
FEMALE THE ELDER				MALE THE ELDER			
Ages	$2\frac{1}{2}\,\%$	$3\,\%$	$3\frac{1}{2}\,\%$	Ages	$2\frac{1}{2}\,\%$	$3\,\%$	$3\frac{1}{2}\,\%$
M. F.					F. M.		
20 20	18·580	17·235	16·047	20 20	18·580	17·235	16·047
20 25	18·124	16·848	15·717	20 25	17·887	16·638	15·530
20 30	17·568	16·375	15·313	20 30	17·114	15·971	14·952
20 35	16·890	15·797	14·817	20 35	16·258	15·229	14·304
20 40	16·067	15·087	14·202	20 40	15·311	14·402	13·579
20 45	15·066	14·211	13·434	20 45	14·263	13·479	12·763
20 50	13·842	13·122	12·463	20 50	13·092	12·435	11·831
20 55	12·436	11·854	11·316	20 55	11·761	11·233	10·743
20 60	10·880	10·431	10·012	20 60	10·207	9·806	9·431
20 65	9·129	8·803	8·497	20 65	8·373	8·091	7·825
20 70	7·370	7·149	6·938	20 70	6·694	6·503	6·321
20 75	5·662	5·521	5·387	20 75	5·209	5·086	4·968
20 80	4·218	4·133	4·051	20 80	3·872	3·797	3·725
20 85	2·977	2·929	2·883	20 85	2·809	2·765	2·722
20 90	2·028	2·002	1·977	20 90	1·969	1·945	1·921
20 95	1·261	1·249	1·238	20 95	1·129	1·119	1·110
25 25	17·497	16·304	15·242	25 25	17·497	16·304	15·242
25 30	17·014	15·890	14·886	25 30	16·790	15·689	14·705
25 35	16·411	15·372	14·439	25 35	15·993	14·995	14·098
25 40	15·659	14·721	13·873	25 40	15·097	14·211	13·408
25 45	14·726	13·903	13·154	25 45	14·093	13·324	12·623
25 50	13·566	12·870	12·232	25 50	12·959	12·313	11·719
25 55	12·221	11·655	11·131	25 55	11·659	11·139	10·655
25 60	10·719	10·281	9·871	25 60	10·133	9·736	9·365
25 65	9·016	8·697	8·396	25 65	8·322	8·043	7·779
25 70	7·296	7·078	6·871	25 70	6·660	6·471	6·291
25 75	5·616	5·477	5·344	25 75	5·187	5·065	4·948
25 80	4·190	4·106	4·025	25 80	3·859	3·785	3·713
25 85	2·962	2·915	2·869	25 85	2·801	2·758	2·715
25 90	2·020	1·995	1·970	25 90	1·965	1·941	1·918
25 95	1·257	1·246	1·234	25 95	1·128	1·118	1·108
30 30	16·383	15·337	14·399	30 30	16·383	15·337	14·399
30 35	15·864	14·888	14·008	30 35	15·660	14·704	13·842
30 40	15·197	14·307	13·501	30 40	14·833	13·976	13·199
30 45	14·344	13·557	12·840	30 45	13·887	13·139	12·456
30 50	13·259	12·589	11·973	30 50	12·802	12·169	11·588
30 55	11·981	11·433	10·925	30 55	11·542	11·030	10·555
30 60	10·539	10·112	9·714	30 60	10·049	9·658	9·292
30 65	8·889	8·577	8·283	30 65	8·266	7·990	7·729
30 70	7·212	6·998	6·794	30 70	6·623	6·435	6·257
30 75	5·564	5·427	5·296	30 75	5·164	5·043	4·926
30 80	4·160	4·077	3·996	30 80	3·845	3·771	3·700
30 85	2·945	2·898	2·853	30 85	2·793	2·750	2·708
30 90	2·011	1·986	1·961	30 90	1·961	1·937	1·913
30 95	1·253	1·242	1·231	30 95	1·126	1·116	1·106

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883. MALE AND FEMALE

| FEMALE THE ELDER | | | | MALE THE ELDER | | | |
Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %
M. F.				F. M.			
35 35	15·229	14·327	13·511	35 35	15·229	14·327	13·511
35 40	14·659	13·827	13·071	35 40	14·488	13·671	12·928
35 45	13·904	13·159	12·479	35 45	13·621	12·901	12·242
35 50	12·909	12·269	11·680	35 50	12·603	11·989	11·423
35 55	11·711	11·183	10·694	35 55	11·399	10·898	10·433
35 60	10·338	9·924	9·537	35 60	9·950	9·566	9·206
35 65	8·747	8·443	8·156	35 65	8·201	7·929	7·671
35 70	7·117	6·907	6·708	35 70	6·582	6·396	6·219
35 75	5·505	5·370	5·241	35 75	5·138	5·018	4·902
35 80	4·125	4·043	3·964	35 80	3·830	3·757	3·686
35 85	2·926	2·880	2·835	35 85	2·784	2·741	2·699
35 90	2·001	1·976	1·951	35 90	1·956	1·932	1·909
35 95	1·249	1·237	1·226	35 95	1·124	1·114	1·104
40 40	14·022	13·258	12·562	40 40	14·022	13·258	12·562
40 45	13·379	12·687	12·052	40 45	13·256	12·574	11·949
40 50	12·497	11·893	11·337	40 50	12·331	11·742	11·199
40 55	11·399	10·895	10·427	40 55	11·205	10·721	10·270
40 60	10·109	9·710	9·337	40 60	9·820	9·445	9·093
40 65	8·587	8·292	8·013	40 65	8·119	7·852	7·598
40 70	7·010	6·806	6·611	40 70	6·531	6·348	6·174
40 75	5·438	5·306	5·180	40 75	5·108	4·989	4·875
40 80	4·085	4·004	3·926	40 80	3·813	3·740	3·669
40 85	2·904	2·858	2·814	40 85	2·775	2·732	2·690
40 90	1·989	1·965	1·940	40 90	1·951	1·927	1·903
40 95	1·244	1·232	1·221	40 95	1·122	1·112	1·102
45 45	12·736	12·108	11·529	45 45	12·736	12·108	11·529
45 50	11·988	11·430	10·914	45 50	11·932	11·381	10·871
45 55	11·017	10·544	10·103	45 55	10·918	10·458	10·028
45 60	9·837	9·457	9·101	45 60	9·627	9·265	8·926
45 65	8·402	8·117	7·849	45 65	7·999	7·739	7·493
45 70	6·889	6·691	6·502	45 70	6·460	6·280	6·109
45 75	5·363	5·234	5·110	45 75	5·067	4·950	4·837
45 80	4·040	3·961	3·884	45 80	3·791	3·718	3·649
45 85	2·879	2·834	2·790	45 85	2·763	2·720	2·679
45 90	1·976	1·952	1·927	45 90	1·945	1·921	1·898
45 95	1·238	1·226	1·215	45 95	1·119	1·110	1·100
50 50	11·331	10·833	10·370	50 50	11·331	10·833	10·370
50 55	10·516	10·084	9·681	50 55	10·465	10·040	9·643
50 60	9·482	9·127	8·795	50 60	9·309	8·970	8·651
50 65	8·169	7·899	7·643	50 65	7·795	7·546	7·311
50 70	6·744	6·553	6·370	50 70	6·332	6·159	5·994
50 75	5·276	5·151	5·030	50 75	4·992	4·878	4·768
50 80	3·990	3·912	3·837	50 80	3·749	3·678	3·609
50 85	2·851	2·806	2·763	50 85	2·740	2·698	2·658
50 90	1·961	1·937	1·913	50 90	1·934	1·910	1·887

For explanation see pp. 29-31

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883.   MALE AND FEMALE

FEMALE THE ELDER				MALE THE ELDER			
Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	Ages	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %
M. F.				F. M.			
50 95	1·231	1·220	1·208	50 95	1·116	1·106	1·097
55 55	9·825	9·447	9·093	55 55	9·825	9·447	9·093
55 60	8·974	8·656	8·356	55 60	8·845	8·536	8·245
55 65	7·830	7·582	7·346	55 65	7·487	7·256	7·037
55 70	6·539	6·358	6·186	55 70	6·138	5·974	5·817
55 75	5·161	5·040	4·925	55 75	4·873	4·763	4·658
55 80	3·927	3·851	3·778	55 80	3·679	3·610	3·544
55 85	2·818	2·774	2·732	55 85	2·700	2·659	2·619
55 90	1·944	1·920	1·896	55 90	1·912	1·888	1·866
55 95	1·223	1·212	1·201	55 95	1·106	1·097	1·087
60 60	8·201	7·934	7·681	60 60	8·201	7·934	7·681
60 65	7·279	7·063	6·857	60 65	7·049	6·843	6·647
60 70	6·182	6·020	5·866	60 70	5·858	5·707	5·564
60 75	4·955	4·844	4·737	60 75	4·706	4·603	4·504
60 80	3·818	3·747	3·678	60 80	3·586	3·520	3·457
60 85	2·766	2·724	2·683	60 85	2·651	2·611	2·572
60 90	1·920	1·897	1·874	60 90	1·887	1·864	1·842
60 95	1·214	1·203	1·192	60 95	1·098	1·088	1·079
65 65	6·374	6·202	6·038	65 65	6·374	6·202	6·038
65 70	5·528	5·394	5·266	65 70	5·394	5·264	5·140
65 75	4·524	4·428	4·336	65 75	4·408	4·316	4·228
65 80	3·554	3·491	3·429	65 80	3·408	3·348	3·289
65 85	2·619	2·581	2·543	65 85	2·549	2·511	2·475
65 90	1·844	1·822	1·800	65 90	1·832	1·810	1·789
65 95	1·182	1·171	1·161	65 95	1·076	1·066	1·057
70 70	4·781	4·675	4·574	70 70	4·781	4·675	4·574
70 75	4·001	3·923	3·848	70 75	3·995	3·918	3·843
70 80	3·213	3·159	3·107	70 80	3·152	3·100	3·049
70 85	2·415	2·381	2·348	70 85	2·399	2·366	2·333
70 90	1·727	1·707	1·688	70 90	1·751	1·731	1·711
70 95	1·125	1·115	1·105	70 95	1·044	1·035	1·027
75 75	3·430	3·370	3·311	75 75	3·430	3·370	3·311
75 80	2·829	2·785	2·742	75 80	2·774	2·731	2·690
75 85	2·181	2·152	2·124	75 85	2·160	2·132	2·104
75 90	1·595	1·577	1·560	75 90	1·610	1·592	1·575
75 95	1·063	1·054	1·045	75 95	·984	·976	·968
80 80	2·352	2·320	2·288	80 80	2·352	2·320	2·288
80 85	1·868	1·845	1·823	80 85	1·882	1·859	1·837
80 90	1·402	1·388	1·373	80 90	1·440	1·425	1·410
80 95	·962	·954	·946	80 95	·908	·900	·893
85 85	1·540	1·524	1·507	85 85	1·540	1·524	1·507
85 90	1·191	1·179	1·168	85 90	1·215	1·203	1·192
85 95	·846	·839	·832	85 95	·799	·793	·787
90 90	·968	·960	·951	90 90	·968	·960	·951
90 95	·712	·707	·702	90 95	·666	·661	·657
95 95	·519	·515	·512	95 95	·519	·515	·512

Value of an Annuity for the Joint Continuance of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE							
Ages	**3** %	**3½** %	**4** %	Ages	**3** %	**3½** %	**4** %
10 10	21·0079	19·3289	17·8656	20 60	9·6503	9·2849	8·9422
10 15	20·4046	18·8209	17·4348	20 65	8·0149	7·7544	7·5079
10 20	19·6575	18·1842	16·8879	20 70	6·3944	6·2197	6·0531
10 25	18·9794	17·6168	16·4105	20 75	4·8992	4·7883	4·6817
10 30	18·1217	16·8869	15·7863	20 80	3·6458	3·5784	3·5132
10 35	17·1325	16·0360	15·0513	20 85	2·6828	2·6429	2·6042
10 40	15·9913	15·0410	14·1806	20 90	1·7153	1·6974	1·6799
10 45	14·6570	13·8586	13·1296	20 95	·4122	·4099	·4076
10 50	13·1800	12·5312	11·9335	25 25	17·5703	16·3949	15·3455
10 55	11·5676	11·0611	10·5905	25 30	16·9261	15·8382	14·8621
10 60	9·8667	9·4891	9·1350	25 35	16·1390	15·1537	14·2645
10 65	8·1707	7·9025	7·6489	25 40	15·1822	14·3135	13·5241
10 70	6·4997	6·3206	6·1498	25 45	14·0130	13·2723	12·5945
10 75	4·9661	4·8528	4·7440	25 50	12·6787	12·0695	11·5075
10 80	3·6859	3·6173	3·5509	25 55	11·1886	10·7083	10·2615
10 85	2·7056	2·6652	2·6259	25 60	9·5902	9·2291	8·8904
10 90	1·7242	1·7062	1·6885	25 65	7·9774	7·7191	7·4748
10 95	·4129	·4107	·4084	25 70	6·3726	6·1990	6·0334
15 15	19·8661	18·3635	17·0435	25 75	4·8875	4·7771	4·6710
15 20	19·1866	17·7798	16·5386	25 80	3·6400	3·5728	3·5078
15 25	18·5708	17·2617	16·1006	25 85	2·6801	2·6404	2·6017
15 30	17·7738	16·5811	15·5163	25 90	1·7145	1·6967	1·6792
15 35	16·8405	15·7762	14·8192	25 95	·4121	·4098	·4075
15 40	15·7501	14·8240	13·9848	30 30	16·3734	15·3561	14·4399
15 45	14·4623	13·6816	12·9684	30 35	15·6810	14·7501	13·9077
15 50	13·0271	12·3908	11·8045	30 40	14·8162	13·9872	13·2324
15 55	11·4524	10·9544	10·4915	30 45	13·7313	13·0182	12·3645
15 60	9·7844	9·4122	9·0633	30 50	12·4690	11·8779	11·3320
15 65	8·1160	7·8512	7·6007	30 55	11·0378	10·5688	10·1322
15 70	6·4676	6·2903	6·1213	30 60	9·4855	9·1311	8·7984
15 75	4·9502	4·8378	4·7298	30 65	7·9071	7·6525	7·4117
15 80	3·6801	3·6118	3·5459	30 70	6·3275	6·1559	5·9922
15 85	2·7055	2·6652	2·6260	30 75	4·8598	4·7503	4·6452
15 90	1·7272	1·7092	1·6915	30 80	3·6234	3·5567	3·4922
15 95	·4138	·4115	·4093	30 85	2·6705	2·6310	2·5925
20 20	18·5817	17·2554	16·0809	30 90	1·7102	1·6925	1·6750
20 25	18·0385	16·7952	15·6891	30 95	·4115	·4092	·4070
20 30	17·3149	16·1739	15·1533	35 35	15·0950	14·2329	13·4496
20 35	16·4510	15·4263	14·5035	35 40	14·3405	13·5632	12·8535
20 40	15·4240	14·5274	13·7141	35 45	13·3625	12·6859	12·0644
20 45	14·1936	13·4344	12·7402	35 50	12·1954	11·6285	11·1041
20 50	12·8092	12·1880	11·6153	35 55	10·8436	10·3896	9·9665
20 55	11·2791	10·7916	10·3381	35 60	9·3536	9·0080	8·6833

For explanation see pp. 29–31

Value of an Annuity for the Joint Continuance of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
35 65	7·8211	7·5714	7·3350	55 70	5·6627	5·5216	5·3865
35 70	6·2742	6·1050	5·9437	55 75	4·4616	4·3673	4·2764
35 75	4·8279	4·7197	4·6157	55 80	3·3947	3·3349	3·2770
35 80	3·6051	3·5389	3·4749	55 85	2·5429	2·5063	2·4706
35 85	2·6600	2·6207	2·5825•	55 90	1·6568	1·6398	1·6231
35 90	1·7058	1·6881	1·6707	55 95	·4051	·4029	·4007
35 95	·4110	·4087	·4065	60 60	7·1988	6·9834	6·7787
40 40	13·7103	12·9996	12·3479	60 65	6·3213	6·1504	5·9872
40 45	12·8622	12·2343	11·6557	60 70	5·3013	5·1755	5·0548
40 50	11·8177	11·2841	10·7894	60 75	4·2332	4·1469	4·0638
40 55	10·5734	10·1406	9·7366	60 80	3·2576	3·2018	3·1476
40 60	9·1705	8·8373	8·5241	60 85	2·4634	2·4285	2·3945
40 65	7·7034	7·4605	7·2304	60 90	1·6224	1·6059	1·5897
40 70	6·2029	6·0372	5·8790	60 95	·4010	·3987	·3965
40 75	4·7868	4·6802	4·5777	65 65	5·6519	5·5115	5·3771
40 80	3·5821	3·5166	3·4533	65 70	4·8312	4·7242	4·6213
40 85	2·6476	2·6085	2·5705	65 75	3·9266	3·8507	3·7775
40 90	1·7005	1·6828	1·6655	65 80	3·0687	3·0181	2·9690
40 95	·4103	·4080	·4058	65 85	2·3514	2·3190	2·2873
45 45	12·1619	11·5979	11·0760	65 90	1·5719	1·5561	1·5406
45 50	11·2685	10·7807	10·3270	65 95	·3944	·3922	·3901
45 55	10·1663	9·7638	9·3873	70 70	4·2226	4·1378	4·0560
45 60	8·8855	8·5709	8·2747	70 75	3·5095	3·4470	3·3865
45 65	7·5145	7·2821	7·0618	70 80	2·8014	2·7580	2·7159
45 70	6·0851	5·9249	5·7719	70 85	2·1880	2·1591	2·1309
45 75	4·7171	4·6132	4·5132	70 90	1·4989	1·4841	1·4696
45 80	3·5425	3·4782	3·4160	70 95	·3854	·3833	·3812
45 85	2·6257	2·5872	2·5497	75 75	2·9876	2·9395	2·8928
45 90	1·6917	1·6742	1·6570	75 80	2·4424	2·4077	2·3739
45 95	·4094	·4071	·4049	75 85	1·9508	1·9265	1·9028
50 50	10·5428	10·1123	9·7103	75 90	1·3791	1·3659	1·3530
50 55	9·6109	9·2481	8·9078	75 95	·3684	·3663	·3643
50 60	8·4864	8·1970	7·9240	80 80	2·0488	2·0225	1·9969
50 65	7·2447	7·0270	6·8204	80 85	1·6761	1·6569	1·6381
50 70	5·9148	5·7624	5·6167	80 90	1·2319	1·2206	1·2096
50 75	4·6152	4·5152	4·4189	80 95	·3467	·3448	·3429
50 80	3·4839	3·4214	3·3609	85 85	1·4025	1·3877	1·3732
50 85	2·5929	2·5551	2·5183	85 90	1·0676	1·0583	1·0491
50 90	1·6776	1·6603	1·6433	85 95	·3172	·3155	·3138
50 95	·4076	·4053	·4031	90 90	·8693	·8625	·8557
55 55	8·8676	8·5546	8·2598	90 95	·2850	·2835	·2820
55 60	7·9310	7·6749	7·4327	95 95	·1321	·1314	·1308
55 65	6·8562	6·6590	6·4713				

Single Payment to secure £1 at the Death of either of Two Lives according to the NORTHAMPTON TABLE

Ages	3 %	Ages	3 %	Ages	3 %
15 15	·5273	30 55	·6991	50 75	·8406
15 20	·5439	30 60	·7269	50 80	·8730
15 25	·5564	30 65	·7587	50 85	·9013
15 30	·5708	30 70	·7949	50 90	·9218
15 35	·5878	30 75	·8321	50 95	·9640
15 40	·6080	30 80	·8681	55 55	·7471
15 45	·6305	30 85	·8986	55 60	·7644
15 50	·6563	30 90	·9205	55 65	·7864
15 55	·6840	30 95	·9639	55 70	·8138
15 60	·7149	35 35	·6294	55 75	·8442
15 65	·7496	35 40	·6443	55 80	·8750
15 70	·7884	35 45	·6615	55 85	·9025
15 75	·8278	35 50	·6822	55 90	·9224
15 80	·8654	35 55	·7049	55 95	·9641
15 85	·8970	35 60	·7312	60 60	·7785
20 20	·5592	35 65	·7618	60 65	·7970
20 25	·5706	35 70	·7970	60 70	·8212
20 30	·5839	35 75	·8334	60 75	·8489
20 35	·5997	35 80	·8688	60 80	·8778
20 40	·6186	35 85	·8990	60 85	·9040
20 45	·6398	35 90	·9207	60 90	·9231
20 50	·6644	35 95	·9639	60 95	·9641
20 55	·6908	40 40	·6574	65 65	·8115
20 60	·7205	40 45	·6727	65 70	·8316
20 65	·7541	40 50	·6915	65 75	·8556
20 70	·7918	40 55	·7125	65 80	·8817
20 75	·8302	40 60	·7371	65 85	·9061
20 80	·8669	40 65	·7661	65 90	·9241
20 85	·8980	40 70	·7999	65 95	·9642
20 90	·9202	40 75	·8353	70 70	·8468
25 25	·5811	40 80	·8698	70 75	·8660
25 30	·5932	40 85	·8996	70 80	·8881
25 35	·6079	40 90	·9210	70 85	·9098
25 40	·6256	40 95	·9640	70 90	·9259
25 45	·6457	45 45	·6861	70 95	·9643
25 50	·6692	45 50	·7028	75 75	·8802
25 55	·6946	45 55	·7216	75 80	·8973
25 60	·7234	45 60	·7442	75 85	·9154
25 65	·7562	45 65	·7713	75 90	·9289
25 70	·7932	45 70	·8034	75 95	·9645
25 75	·8311	45 75	·8375	80 80	·9091
25 80	·8675	45 80	·8711	80 85	·9230
25 85	·8983	45 85	·9003	80 90	·9330
25 90	·9204	45 90	·9213	80 95	·9648
25 95	·9639	45 95	·9640	85 85	·9327
30 30	·6042	50 50	·7170	85 90	·9396
30 35	·6175	50 55	·7334	85 95	·9654
30 40	·6339	50 60	·7536	90 90	·9436
30 45	·6527	50 65	·7783	90 95	·9657
30 50	·6749	50 70	·8083	95 95	·9691

For explanation see pp. 29–31

Single Payment to secure £1 at the Death of either of Two Lives according to the CARLISLE TABLE					
Ages	3 %	Ages	3 %	Ages	3 %
15 15	·4202	30 55	·6479	50 75	·8246
15 20	·4343	30 60	·6933	50 80	·8528
15 25	·4526	30 65	·7313	50 85	·8823
15 30	·4739	30 70	·7768	50 90	·9020
15 35	·4963	30 75	·8190	50 95	·8943
15 40	·5238	30 80	·8495	55 55	·7057
15 45	·5520	30 85	·8804	55 60	·7350
15 50	·5884	30 90	·9006	55 65	·7606
15 55	·6351	30 95	·8931	55 70	·7956
15 60	·6839	35 35	·5421	55 75	·8307
15 65	·7245	35 40	·5617	55 80	·8567
15 70	·7723	35 45	·5826	55 85	·8846
15 75	·8161	35 50	·6122	55 90	·9037
15 80	·8475	35 55	·6528	55 95	·8959
15 85	·8792	35 60	·6968	60 60	·7584
20 20	·4468	35 65	·7338	60 65	·7790
20 25	·4635	35 70	·7784	60 70	·8088
20 30	·4831	35 75	·8200	60 75	·8399
20 35	·5039	35 80	·8501	60 80	·8632
20 40	·5302	35 85	·8807	60 85	·8890
20 45	·5571	35 90	·9009	60 90	·9068
20 50	·5924	35 95	·8933	60 95	·8993
20 55	·6380	40 40	·5782	65 65	·7948
20 60	·6860	40 45	·5961	65 70	·8196
20 65	·7259	40 50	·6227	65 75	·8469
20 70	·7731	40 55	·6604	65 80	·8677
20 75	·8166	40 60	·7022	65 85	·8917
20 80	·8478	40 65	·7377	65 90	·9088
20 85	·8793	40 70	·7811	65 95	·9010
20 90	·8999	40 75	·8219	70 70	·8382
25 25	·4782	40 80	·8514	70 75	·8601
25 30	·4958	40 85	·8816	70 80	·8769
25 35	·5148	40 90	·9015	70 85	·8974
25 40	·5391	40 95	·8940	70 90	·9130
25 45	·5644	45 45	·6105	70 95	·9054
25 50	·5983	45 50	·6336	75 75	·8768
25 55	·6425	45 55	·6680	75 80	·8896
25 60	·6893	45 60	·7069	75 85	·9063
25 65	·7283	45 65	·7405	75 90	·9197
25 70	·7747	45 70	·7826	75 95	·9128
25 75	·8176	45 75	·8226	80 80	·8992
25 80	·8484	45 80	·8518	80 85	·9128
25 85	·8797	45 85	·8819	80 90	·9246
25 90	·9002	45 90	·9017	80 95	·9183
25 95	·8926	45 95	·8942	85 85	·9226
30 30	·5111	50 50	·6522	85 90	·9320
30 35	·5279	50 55	·6818	85 95	·9269
30 40	·5500	50 60	·7166	90 90	·9392
30 45	·5733	50 65	·7469	90 95	·9354
30 50	·6053	50 70	·7863	95 95	·9306

For explanation see pp. 29–31

Single Payment to secure £1 at the Death of either of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
10 10	·35900	·31256	·27439	20 70	·78463	·75586	·72872
10 15	·37657	·32974	·29096	20 75	·82818	·80426	·78147
10 20	·39833	·35125	·31200	20 80	·86469	·84518	·82641
10 25	·41808	·37045	·33036	20 85	·89273	·87681	·86138
10 30	·44306	·39514	·35437	20 90	·92091	·90878	·89693
10 35	·47187	·42391	·38263	20 95	·95887	·95232	·94586
10 40	·50511	·45756	·41612	25 25	·45912	·41177	·37132
10 45	·54397	·49754	·45655	25 30	·47788	·43060	·38991
10 50	·58699	·54243	·50255	25 35	·50081	·45375	·41290
10 55	·63396	·59214	·55421	25 40	·52868	·48216	·44137
10 60	·68350	·64530	·61019	25 45	·56273	·51737	·47713
10 65	·73289	·69895	·66735	25 50	·60159	·55804	·51894
10 70	·78156	·75245	·72500	25 55	·64499	·60407	·56686
10 75	·82623	·80208	·77907	25 60	·69155	·65409	·61960
10 80	·86352	·84386	·82496	25 65	·73852	·70515	·67404
10 85	·89207	·87606	·86054	25 70	·78527	·75656	·72948
10 90	·92065	·90849	·89659	25 75	·82852	·80464	·78188
10 95	·95885	·95230	·94583	25 80	·86486	·84537	·82662
15 15	·39225	·34520	·30601	25 85	·89281	·87690	·86147
15 20	·41205	·36494	·32543	25 90	·92094	·90881	·89695
15 25	·42998	·38246	·34228	25 95	·95887	·95233	·94586
15 30	·45319	·40548	·36475	30 30	·49398	·44690	·40615
15 35	·48038	·43270	·39156	30 35	·51415	·46739	·42662
15 40	·51214	·46488	·42365	30 40	·53934	·49319	·45259
15 45	·54965	·50353	·46275	30 45	·57094	·52596	·48597
15 50	·59145	·54718	·50751	30 50	·60770	·56452	·52569
15 55	·63731	·59575	·55801	30 55	·64939	·60879	·57183
15 60	·68589	·64790	·61295	30 60	·69460	·65741	·62313
15 65	·73449	·70069	·66920	30 65	·74057	·70741	·67647
15 70	·78250	·75347	·72610	30 70	·78658	·75802	·73107
15 75	·82669	·80259	·77962	30 75	·82933	·80555	·78287
15 80	·86369	·84405	·82516	30 80	·86534	·84591	·82722
15 85	·89207	·87606	·86054	30 85	·89309	·87721	·86183
15 90	·92057	·90839	·89648	30 90	·92106	·90895	·89711
15 95	·95882	·95227	·94580	30 95	·95889	·95235	·94588
20 20	·42966	·38268	·34303	35 35	·53122	·48488	·44424
20 25	·44548	·39824	·35810	35 40	·55319	·50753	·46717
20 30	·46656	·41925	·37871	35 45	·58168	·53720	·49752
20 35	·49172	·44453	·40370	35 50	·61567	·57295	·53446
20 40	·52163	·47493	·43407	35 55	·65504	·61485	·57821
20 45	·55747	·51189	·47152	35 60	·69844	·66157	·62756
20 50	·59779	·55403	·51479	35 65	·74308	·71015	·67942
20 55	·64236	·60126	·56391	35 70	·78813	·75974	·73293
20 60	·68980	·65221	·61760	35 75	·83026	·80658	·78401
20 65	·73743	·70396	·67277	35 80	·86587	·84651	·82789

For explanation see pp. 29-31

Single Payment to secure £1 at the Death of either of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
35 85	·89340	·87756	·86220	55 75	·84093	·81850	·79706
35 90	·92119	·90910	·89728	55 80	·87200	·85341	·83550
35 95	·95890	·95236	·94590	55 85	·89681	·88143	·86651
40 40	·57155	·52659	·48661	55 90	·92262	·91073	·89911
40 45	·59625	·55247	·51324	55 95	·95908	·95256	·94613
40 50	·62667	·58460	·54656	60 60	·76120	·73003	·70082
40 55	·66291	·62327	·58705	60 65	·78676	·75820	·73126
40 60	·70377	·66734	·63368	60 70	·81647	·79117	·76712
40 65	·74650	·71390	·68344	60 75	·84758	·82595	·80524
40 70	·79021	·76203	·73542	60 80	·87599	·85791	·84048
40 75	·83145	·80792	·78547	60 85	·89913	·88406	·86944
40 80	·86654	·84727	·82872	60 90	·92362	·91188	·90039
40 85	·89376	·87797	·86267	60 95	·95919	·95270	·94629
40 90	·92135	·90928	·89748	65 65	·80626	·77981	·75472
40 95	·95892	·95239	·94593	65 70	·83016	·80643	·78379
45 45	·61665	·57399	·53553	65 75	·85651	·83597	·81625
45 50	·64267	·60162	·56434	65 80	·88150	·86412	·84734
45 55	·67477	·63601	·60048	65 85	·90239	·88776	·87356
45 60	·71207	·67635	·64328	65 90	·92509	·91356	·90228
45 65	·75201	·71993	·68993	65 95	·95939	·95292	·94653
45 70	·79364	·76583	·73954	70 70	·84789	·82626	·80554
45 75	·83348	·81018	·78795	70 75	·86866	·84962	·83129
45 80	·86770	·84857	·83015	70 80	·88928	·87292	·85708
45 85	·89440	·87870	·86347	70 85	·90715	·89317	·87958
45 90	·92160	·90957	·89781	70 90	·92722	·91600	·90501
45 95	·95895	·95242	·94596	70 95	·95965	·95322	·94688
50 50	·66380	·62423	·58806	75 75	·88386	·86678	·85028
50 55	·69095	·65345	·61893	75 80	·89974	·88477	·87023
50 60	·72370	·68899	·65677	75 85	·91405	·90104	·88835
50 65	·75986	·72856	·69921	75 90	·93071	·91999	·90950
50 70	·79863	·77132	·74551	75 95	·96014	·95380	·94753
50 75	·83645	·81350	·79158	80 80	·91120	·89779	·88473
50 80	·86940	·85049	·83227	80 85	·92206	·91015	·89853
50 85	·89535	·87978	·86468	80 90	·93499	·92491	·91501
50 90	·92201	·91004	·89833	80 95	·96078	·95452	·94835
50 95	·95900	·95248	·94603	85 85	·93002	·91926	·90872
55 55	·71260	·67690	·64385	85 90	·93978	·93040	·92119
55 60	·73988	·70665	·67566	85 95	·96164	·95552	·94947
55 65	·77118	·74100	·71264	90 90	·94555	·93702	·92863
55 70	·80594	·77947	·75436	90 95	·96257	·95660	·95069
				95 95	·96703	·96174	·95651

Annual Payment during the Joint Continuance of Two Lives to secure £1 at the First Death according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
10 10	·016	·015	·015	30 55	·054	·053	·051
10 20	·019	·018	·017	30 60	·066	·065	·064
10 30	·023	·022	·021	30 70	·107	·106	·105
10 40	·030	·028	·027	30 80	·187	·186	·184
10 50	·041	·040	·039	30 90	·340	·338	·335
10 60	·063	·062	·060	35 35	·033	·032	·031
10 70	·104	·103	·101	35 40	·036	·035	·034
10 80	·184	·183	·181	35 45	·040	·039	·038
10 90	·338	·336	·333	35 50	·047	·045	·044
15 15	·019	·018	·017	35 55	·055	·054	·053
15 20	·020	·019	·019	35 60	·067	·066	·065
15 25	·022	·021	·020	35 70	·108	·107	·106
15 30	·024	·023	·022	35 80	·188	·186	·184
15 35	·027	·026	·025	35 90	·340	·338	·336
15 40	·031	·029	·028	40 40	·039	·038	·036
15 45	·036	·034	·033	40 45	·043	·042	·041
15 50	·042	·041	·040	40 50	·049	·048	·046
15 55	·051	·050	·049	40 55	·057	·056	·055
15 60	·064	·062	·061	40 60	·069	·068	·067
15 70	·105	·103	·102	40 70	·110	·108	·107
15 80	·185	·183	·181	40 80	·189	·188	·186
15 90	·338	·336	·333	40 90	·341	·339	·337
20 20	·022	·021	·020	45 45	·047	·046	·044
20 25	·023	·022	·021	45 50	·052	·051	·050
20 30	·025	·024	·023	45 55	·060	·059	·058
20 35	·028	·027	·026	45 60	·072	·071	·069
20 40	·032	·031	·029	45 70	·112	·111	·109
20 45	·037	·035	·034	45 80	·191	·189	·188
20 50	·043	·042	·041	45 90	·342	·340	·338
20 55	·052	·051	·050	50 50	·058	·056	·055
20 60	·065	·063	·062	50 55	·065	·064	·062
20 70	·106	·105	·103	50 60	·076	·075	·074
20 80	·186	·185	·183	50 70	·115	·114	·113
20 90	·339	·337	·335	50 80	·194	·192	·191
25 25	·025	·024	·023	50 90	·344	·342	·340
25 30	·027	·026	·025	55 55	·072	·071	·070
25 35	·029	·028	·027	55 60	·083	·081	·080
25 40	·033	·031	·030	55 70	·121	·120	·118
25 45	·037	·036	·035	55 80	·198	·197	·195
25 50	·044	·043	·041	55 90	·347	·345	·343
25 55	·053	·052	·050	60 60	·093	·091	·090
25 60	·065	·064	·063	60 70	·130	·128	·126
25 70	·107	·105	·104	60 80	·206	·204	·203
25 80	·186	·185	·183	60 90	·352	·350	·348
25 90	·339	·337	·335	70 70	·162	·161	·159
30 30	·028	·027	·026	70 80	·234	·232	·231
30 35	·031	·030	·029	70 90	·372	·369	·366
30 40	·034	·033	·032	80 80	·299	·297	·295
30 45	·039	·038	·036	80 90	·419	·416	·414
30 50	·045	·044	·043	90 90	·471	·468	·465

For explanation see pp. 29–31

	Value of an Annuity during the Continuance of either of Two Lives according to the NORTHAMPTON TABLE				
Ages	3 %	4 %	5 %	6 %	Ages
15 15	24·015	20·171	17·216	14·954	15 15
15 25	23·241	19·599	16·831	14·665	15 25
15 35	22·444	19·043	16·435	14·368	15 35
15 45	21·662	18·467	16·003	14·027	15 45
15 55	20·957	17·915	15·567	13·674	15 55
15 65	20·364	17·425	15·155	13·343	15 65
15 75	19·945	17·058	14·837	13·069	15 75
20 20	23·143	19·531	16·782	14·640	20 20
20 30	22·274	18·941	16·372	14·348	20 30
20 40	21·390	18·306	15·907	14·003	20 40
20 50	20·551	17·667	15·415	13·620	20 50
20 60	19·818	17·077	14·936	13·228	20 60
20 70	19·223	16·568	14·498	12·852	20 70
20 80	18·850	16·233	14·197	12·578	20 80
25 25	22·245	18·932	16·370	14·382	25 25
25 35	21·289	18·260	15·894	13·979	25 35
25 45	20·342	17·561	15·368	13·569	25 45
25 55	19·480	16·885	14·833	13·142	25 55
25 65	18·748	16·279	14·324	12·719	25 65
25 75	18·214	15·811	13·915	12·369	25 75
30 30	21·255	18·249	15·889	14·004	30 30
30 40	20·202	17·488	15·333	13·592	30 40
30 50	19·198	16·724	14·745	13·133	30 50
30 60	18·321	16·018	14·172	12·665	30 60
30 70	17·613	15·413	13·653	12·218	30 70
30 80	17·173	15·018	13·297	11·895	30 80
35 35	20·154	17·466	15·324	13·557	35 35
35 45	19·008	16·616	14·686	13·070	35 45
35 55	17·957	15·792	14·035	12·547	35 55
35 65	17·065	15·053	13·414	12·024	35 65
35 75	16·417	14·485	12·919	11·614	35 75
40 40	18·932	16·574	14·658	13·088	40 40
40 50	17·694	15·627	13·929	12·520	40 50
40 60	16·600	14·746	13·214	11·935	40 60
40 70	15·711	13·987	12·562	11·374	40 70
40 80	15·160	13·491	12·116	10·969	40 80
45 45	17·608	15·576	13·898	12·463	45 45
45 55	16·285	14·536	13·076	11·809	45 55
45 65	15·146	13·591	12·283	11·252	45 65
45 75	14·311	12·859	11·643	10·594	45 75
50 50	16·158	14·447	13·016	11·804	50 50
50 60	14·752	13·314	12·093	11·048	50 60
50 70	13·588	12·319	11·238	10·311	50 70
50 80	12·855	11·660	10·644	9·772	50 80
55 55	14·619	13·223	12·029	10·965	55 55
55 65	13·120	11·976	10·983	10·100	55 65
55 75	11·999	10·992	10·120	9·342	55 75
60 60	12·948	11·852	10·896	10·061	60 60
60 70	11·372	10·500	9·735	9·058	60 70
60 80	10·361	9·590	8·915	8·315	60 80

For explanation see pp. 31, 32

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Value of an Annuity during the Continuance of either of Two Lives according to the **CARLISLE TABLE**

Ages	3 %	Ages	3 %	Ages	3 %	Ages	3 %
5 5	27·570	15 80	22·712	35 40	21·528	55 55	15·715
5 10	27·332	15 85	22·663	35 45	20·965	55 60	14·802
5 15	26·986	15 90	22·640	35 50	20·423	55 65	14·107
5 20	26·665	15 95	22·639	35 55	19·924	55 70	13·513
5 25	26·343	20 20	25·398	35 60	19·515	55 75	13·107
5 30	26·032	20 25	24·941	35 65	19·211	55 80	12·854
5 35	25·737	20 30	24·505	35 70	18·949	55 85	12·677
5 40	25·444	20 35	24·098	35 75	18·767	55 90	12·600
5 45	25·174	20 40	23·707	35 80	18·651	55 95	12·591
5 50	24·902	20 45	23·351	35 85	18·567	60 60	13·688
5 55	24·638	20 50	23·003	35 90	18·530	60 65	12·820
5 60	24·411	20 55	22·676	35 95	18·527	60 70	12·050
5 65	24·238	20 60	22·404	40 40	20·803	60 75	11·506
5 70	24·079	20 65	22·201	40 45	20·137	60 80	11·161
5 75	23·961	20 70	22·029	40 50	19·490	60 85	10·909
5 80	23·883	20 75	21·909	40 55	18·893	60 90	10·791
5 85	23·820	20 80	21·835	40 60	18·409	60 95	10·790
5 90	23·786	20 85	21·782	40 65	18·054	65 65	11·788
5 95	23·792	20 90	21·757	40 70	17·750	65 70	10·847
10 10	27·060	20 95	21·756	40 75	17·540	65 75	10·173
10 15	26·685	25 25	24·417	40 80	17·406	65 80	9·740
10 20	26·335	25 30	23·912	40 85	17·306	65 85	9·428
10 25	25·989	25 35	23·440	40 90	17·261	65 90	9·285
10 30	25·659	25 40	22·986	40 95	17·261	65 95	9·277
10 35	25·350	25 45	22·575	45 45	19·355	70 70	9·691
10 40	25·049	25 50	22·176	45 50	18·585	70 75	8·831
10 45	24·774	25 55	21·801	45 55	17·871	70 80	8·259
10 50	24·505	25 60	21·489	45 60	17·292	70 85	7·830
10 55	24·253	25 65	21·255	45 65	16·870	70 90	7·635
10 60	24·046	25 70	21·054	45 70	16·521	70 95	7·633
10 65	23·892	25 75	20·915	45 75	16·286	75 75	7·793
10 70	23·761	25 80	20·827	45 80	16·140	75 80	7·086
10 75	23·671	25 85	20·765	45 85	16·036	75 85	6·524
10 80	23·614	25 90	20·737	45 90	15·987	75 90	6·253
10 85	23·575	25 95	20·735	45 95	15·987	75 95	6·276
10 90	23·557	30 30	23·330	50 50	17·662	80 80	6·271
10 95	23·555	30 35	22·782	50 55	16·787	80 85	5·601
15 15	26·256	30 40	22·251	50 60	16·064	80 90	5·274
15 20	25·855	30 45	21·771	50 65	15·528	80 95	5·315
15 25	25·456	30 50	21·308	50 70	15·088	85 85	4·802
15 30	25·075	30 55	20·877	50 75	14·792	85 90	4·393
15 35	24·721	30 60	20·519	50 80	14·613	85 95	4·478
15 40	24·377	30 65	20·251	50 85	14·491	90 90	3·909
15 45	24·062	30 70	20·018	50 90	14·436	90 95	4·039
15 50	23·753	30 75	19·856	50 95	14·430	95 95	4·131
15 55	23·463	30 80	19·753				
15 60	23·221	30 85	19·679				
15 65	23·041	30 90	19·645				
15 70	22·887	30 95	19·644				
15 75	22·779	35 35	22·148				

For explanation see pp. 31, 32

Value of an Annuity during the Continuance of either of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
10 10	27·2889	24·5789	22·2874	30 55	20·9234	19·3953	18·0413
10 20	26·5334	23·9943	21·8324	30 60	20·6178	19·1192	17·7915
10 30	25·8941	23·4826	21·4211	30 70	20·1964	18·7300	17·4317
10 40	25·3333	23·0155	21·0306	30 80	19·9864	18·5311	17·2430
10 50	24·8647	22·6101	20·6790	30 90	19·8971	18·4448	17·1598
10 60	24·5176	22·2995	20·4005	35 35	22·0792	20·4161	18·9440
10 70	24·3052	22·1036	20·2197	35 40	21·4228	19·8639	18·4780
10 80	24·2049	22·0088	20·1299	35 45	20·8181	19·3458	18·0329
10 90	24·1641	21·9694	20·0919	35 50	20·2880	18·8834	17·6287
15 15	26·4501	23·9351	21·7903	35 55	19·8373	18·4834	17·2729
15 20	26·0140	23·5941	21·5221	35 60	19·4694	18·1512	16·9725
15 25	25·6252	23·2862	21·2770	35 70	18·9694	17·6898	16·5461
15 30	25·2517	22·9838	21·0315	35 80	18·7244	17·4578	16·3262
15 35	24·9047	22·6976	20·7945	35 90	18·6212	17·3581	16·2300
15 40	24·5842	22·4279	20·5668	40 40	20·6421	19·2056	17·9215
15 45	24·2893	22·1749	20·3490	40 45	19·9075	18·5755	17·3795
15 50	24·0273	21·9459	20·1484	40 50	19·2548	18·0059	16·8813
15 55	23·7995	21·7434	19·9680	40 55	18·6966	17·5105	16·4407
15 60	23·6096	21·5718	19·8126	40 60	18·2416	17·1000	16·0696
15 70	23·3470	21·3293	19·5886	40 70	17·6298	16·5357	15·5487
15 80	23·2204	21·2097	19·4753	40 80	17·3365	16·2582	15·2857
15 90	23·1708	21·1618	19·4293	40 90	17·2156	16·1415	15·1731
20 20	25·5033	23·1938	21·2067	45 45	19·0251	17·8165	16·7250
20 25	25·0419	22·8280	20·9154	45 50	18·2213	17·1139	16·1095
20 30	24·5950	22·4663	20·6214	45 55	17·5210	16·4919	15·5558
20 35	24·1786	22·1228	20·3371	45 60	16·9439	15·9710	15·0848
20 40	23·7947	21·7998	20·0644	45 70	16·1649	15·2526	14·4216
20 45	23·4424	21·4974	19·8041	45 80	15·7934	14·9012	14·0888
20 50	23·1296	21·2240	19·5645	45 90	15·6417	14·7547	13·9474
20 55	22·8572	20·9815	19·3483	50 50	17·2498	16·2625	15·3617
20 60	22·6281	20·7744	19·1606	50 55	16·3792	15·4878	14·6708
20 70	22·3046	20·4752	18·8837	50 60	15·6458	14·8251	14·0710
20 80	22·1391	20·3184	18·7349	50 70	14·6380	13·8953	13·2123
20 90	22·0671	20·2489	18·6678	50 80	14·1548	13·4382	12·7794
25 25	24·5055	22·4023	20·5759	50 90	13·9586	13·2488	12·5966
25 30	23·9792	21·9760	20·2295	55 55	15·3200	14·5424	13·8254
25 35	23·4860	21·5694	19·8930	55 60	14·3987	13·7083	13·0689
25 40	23·0319	21·1877	19·5713	55 70	13·0876	12·4972	11·9491
25 45	22·6184	20·8335	19·2667	55 80	12·4415	11·8858	11·3699
25 50	22·2555	20·5165	18·9892	55 90	12·1769	11·6304	11·1234
25 55	21·9431	20·2388	18·7418	60 60	13·2730	12·6860	12·1393
25 60	21·6836	20·0042	18·5293	60 70	11·5911	11·1295	10·6972
25 70	21·3218	19·6699	18·2203	60 80	10·7207	10·3051	9·9157
25 80	21·1403	19·4980	18·0572	60 90	10·3534	9·9505	9·5732
25 90	21·0633	19·4236	17·9854	70 70	9·0904	8·8028	8·5300
30 30	23·3614	21·4751	19·8219	70 80	7·5975	7·3845	7·1814
30 35	22·7735	20·9900	19·4200	70 90	6·8975	6·7079	6·5273
30 40	22·2274	20·5310	19·0332	80 80	5·4360	5·3219	5·2117
30 45	21·7296	20·1046	18·6669	80 90	4·2504	4·1733	4·0986
30 50	21·2947	19·7251	18·3349	90 90	2·6105	2·5809	2·5521

For explanation see pp. 31, 32

K 2

Single Payment to secure £1 at the Death of the Last of Two Lives according to the NORTHAMPTON TABLE

Ages	3 %	Ages	3 %	Ages	3 %
20 20	·2968	15 15	·2693	35 55	·4479
21 21	·3019	15 20	·2824	35 60	·4615
22 22	·3070	15 25	·2939	35 65	·4738
23 23	·3122	15 30	·3055	35 70	·4844
24 24	·3175	15 35	·3172	35 75	·4927
25 25	·3230	15 40	·3288	35 80	·4986
26 26	·3285	15 45	·3399	40 45	·4378
27 27	·3341	15 50	·3506	40 50	·4555
28 28	·3399	15 55	·3605	40 55	·4720
29 29	·3458	15 60	·3696	40 60	·4874
30 30	·3518	15 65	·3777	40 65	·5013
31 31	·3580	15 70	·3846	40 70	·5133
32 32	·3642	15 75	·3899	40 75	·5226
33 33	·3707	15 80	·3937	40 80	·5293
34 34	·3772	20 25	·3094	45 50	·4779
35 35	·3839	20 30	·3221	45 55	·4965
36 36	·3907	20 35	·3350	45 60	·5139
37 37	·3977	20 40	·3479	45 65	·5297
38 38	·4048	20 45	·3603	45 70	·5434
39 39	·4121	20 50	·3723	45 75	·5540
40 40	·4195	20 55	·3833	45 80	·5617
41 41	·4270	20 60	·3936	50 55	·5213
42 42	·4346	20 65	·4029	50 60	·5412
43 43	·4422	20 70	·4110	50 65	·5593
44 44	·4501	20 75	·4173	50 70	·5751
45 45	·4580	20 80	·4218	50 75	·5875
46 46	·4662	25 30	·3368	50 80	·5964
47 47	·4745	25 35	·3508	55 60	·5678
48 48	·4829	25 40	·3648	55 65	·5887
49 49	·4916	25 45	·3784	55 70	·6070
50 50	·5003	25 50	·3914	55 75	·6214
51 51	·5090	25 55	·4035	55 80	·6318
52 52	·5178	25 60	·4147	60 65	·6181
53 53	·5267	25 65	·4248	60 70	·6396
54 54	·5358	25 70	·4335	60 75	·6567
55 55	·5451	25 75	·4403	60 80	·6691
56 56	·5545	25 80	·4453	65 70	·6721
57 57	·5641	30 35	·3671	65 75	·6928
58 58	·5738	30 40	·3825	65 80	·7081
59 59	·5837	30 45	·3974	70 70	·7027
60 60	·5937	30 50	·4117	70 75	·7281
61 61	·6039	30 55	·4250	70 80	·7474
62 62	·6142	30 60	·4372	75 75	·7587
63 63	·6248	30 65	·4483	75 80	·7829
64 64	·6355	30 70	·4579	80 80	·8124
65 65	·6465	30 75	·4653	80 85	·8323
66 66	·6575	30 80	·4707	80 90	·8451
67 67	·6687	35 40	·4008	85 85	·8564
68 68	·6800	35 45	·4172	85 90	·8736
69 69	·6913	35 50	·4332	90 90	·8937

For explanation see pp. 31, 32

Single Payment to secure £1 at the Death of the Last of Two Lives according to the CARLISLE TABLE					
Ages	3 %	Ages	3 %	Ages	3 %
15 15	·2061	30 40	·3228	50 60	·5030
15 20	·2178	30 45	·3368	50 65	·5186
15 25	·2294	30 50	·3503	50 70	·5314
15 30	·2405	30 55	·3628	50 75	·5400
15 35	·2508	30 60	·3732	50 80	·5453
15 40	·2609	30 65	·3810	50 85	·5488
15 45	·2700	30 70	·3878	50 90	·5504
15 50	·2790	30 75	·3926	50 95	·5506
15 55	·2875	30 80	·3955	55 55	·5132
15 60	·2945	30 85	·3977	55 60	·5398
15 65	·2998	30 90	·3987	55 65	·5600
15 70	·3043	30 95	·3987	55 70	·5773
15 75	·3074	35 35	·3258	55 75	·5891
15 80	·3094	35 40	·3439	55 80	·5965
15 85	·3108	35 45	·3602	55 85	·6016
15 90	·3115	35 50	·3760	55 90	·6039
15 95	·3115	35 55	·3906	55 95	·6041
20 20	·2311	35 60	·4025	60 60	·5722
20 25	·2444	35 65	·4113	60 65	·5975
20 30	·2571	35 70	·4190	60 70	·6199
20 35	·2690	35 75	·4243	60 75	·6358
20 40	·2804	35 80	·4276	60 80	·6458
20 45	·2908	35 85	·4301	60 85	·6531
20 50	·3009	35 90	·4312	60 90	·6566
20 55	·3104	35 95	·4313	60 95	·6566
20 60	·3183	40 40	·3650	65 65	·6275
20 65	·3242	40 45	·3844	65 70	·6550
20 70	·3293	40 50	·4032	65 75	·6746
20 75	·3328	40 55	·4206	65 80	·6872
20 80	·3349	40 60	·4347	65 85	·6963
20 85	·3364	40 65	·4450	65 90	·7004
20 90	·3372	40 70	·4539	65 95	·7007
20 95	·3372	40 75	·4600	70 70	·6886
25 25	·2597	40 80	·4639	70 75	·7137
25 30	·2744	40 85	·4668	70 80	·7303
25 35	·2882	40 90	·4681	70 85	·7428
25 40	·3014	40 95	·4681	70 90	·7485
25 45	·3134	45 45	·4071	70 95	·7486
25 50	·3250	45 50	·4296	75 75	·7439
25 55	·3359	45 55	·4504	75 80	·7645
25 60	·3450	45 60	·4672	75 85	·7809
25 65	·3518	45 65	·4795	75 90	·7887
25 70	·3577	45 70	·4897	75 95	·7881
25 75	·3617	45 75	·4965	80 80	·7882
25 80	·3643	45 80	·5008	80 85	·8077
25 85	·3661	45 85	·5038	80 90	·8173
25 90	·3669	45 90	·5052	80 95	·8161
25 95	·3669	45 95	·5052	85 85	·8310
30 30	·2914	50 50	·4564	85 90	·8429
30 35	·3073	50 55	·4819	85 95	·8405

For explanation see pp. 31, 32

Single Payment to secure £1 at the Death of the Last of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE							
Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
10 10	·1761	·1350	·1043	30 55	·3615	·3103	·2676
10 20	·1981	·1548	·1218	30 60	·3703	·3196	·2773
10 30	·2167	·1721	·1376	30 70	·3826	·3328	·2911
10 40	·2330	·1879	·1527	30 80	·3888	·3395	·2983
10 50	·2467	·2016	·1662	30 90	·3914	·3424	·3015
10 60	·2568	·2121	·1769	35 35	·3278	·2758	·2329
10 70	·2630	·2187	·1838	35 40	·3469	·2945	·2508
10 80	·2659	·2219	·1873	35 45	·3645	·3120	·2680
10 90	·2671	·2233	·1888	35 50	·3800	·3276	·2835
15 15	·2005	·1568	·1235	35 55	·3931	·3411	·2972
15 20	·2132	·1683	·1338	35 60	·4038	·3524	·3088
15 25	·2245	·1787	·1432	35 70	·4184	·3680	·3252
15 30	·2354	·1890	·1526	35 80	·4255	·3758	·3336
15 35	·2455	·1986	·1618	35 90	·4285	·3793	·3373
15 40	·2548	·2088	·1705	40 40	·3697	·3167	·2723
15 45	·2634	·2163	·1789	40 45	·3911	·3380	·2931
15 50	·2711	·2241	·1866	40 50	·4101	·3573	·3123
15 55	·2777	·2309	·1935	40 55	·4263	·3740	·3292
15 60	·2832	·2367	·1995	40 60	·4396	·3879	·3435
15 70	·2909	·2449	·2081	40 70	·4574	·4070	·3635
15 80	·2946	·2489	·2125	40 80	·4659	·4164	·3736
15 90	·2960	·2506	·2143	40 90	·4694	·4203	·3780
20 20	·2281	·1819	·1459	45 45	·4167	·3637	·3183
20 25	·2515	·1942	·1571	45 50	·4402	·3875	·3419
20 30	·2545	·2064	·1684	45 55	·4606	·4085	·3632
20 35	·2666	·2181	·1794	45 60	·4774	·4261	·3814
20 40	·2778	·2290	·1898	45 70	·5001	·4504	·4069
20 45	·2881	·2392	·1998	45 80	·5109	·4623	·4197
20 50	·2972	·2485	·2091	45 90	·5153	·4672	·4251
20 55	·3051	·2567	·2174	50 50	·4685	·4162	·3707
20 60	·3118	·2637	·2246	50 55	·4938	·4424	·3973
20 70	·3212	·2738	·2352	50 60	·5152	·4648	·4203
20 80	·3260	·2791	·2410	50 70	·5445	·4963	·4534
20 90	·3281	·2814	·2435	50 80	·5586	·5211	·4700
25 25	·2571	·2086	·1702	50 90	·5643	·5182	·4771
25 30	·2725	·2230	·1835	55 55	·5247	·4744	·4298
25 35	·2868	·2368	·1964	55 60	·5515	·5026	·4589
25 40	·3000	·2497	·2088	55 70	·5897	·5436	·5020
25 45	·3121	·2617	·2205	55 80	·6085	·5642	·5242
25 50	·3227	·2724	·2312	55 90	·6162	·5729	·5337
25 55	·3318	·2818	·2407	60 60	·5843	·5372	·4946
25 60	·3393	·2897	·2489	60 70	·6333	·5898	·5501
25 70	·3498	·3010	·2608	60 80	·6586	·6177	·5802
25 80	·3551	·3068	·2670	60 90	·6693	·6297	·5933
25 90	·3574	·3093	·2698	70 70	·7061	·6685	·6335
30 30	·2905	·2400	·1991	70 80	·7496	·7165	·6853
30 35	·3076	·2564	·2146	70 90	·7700	·7393	·7105
30 40	·3235	·2719	·2295	80 80	·8125	·7862	·7611
30 45	·3380	·2863	·2436	80 90	·8471	·8251	·8039
30 50	·3506	·2992	·2564	90 90	·8948	·8789	·8634

For explanation see pp. 31, 32

Annual Payment during the Continuance of either of Two Lives to secure £1 at the Last Death according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE							
Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
10 10	·0062	·0053	·0045	30 55	·0165	·0152	·0141
10 20	·0072	·0062	·0053	30 60	·0171	·0159	·0148
10 30	·0081	·0070	·0061	30 70	·0181	·0169	·0158
10 40	·0088	·0078	·0069	30 80	·0185	·0174	·0164
10 50	·0095	·0085	·0077	30 90	·0187	·0176	·0166
10 60	·0101	·0091	·0083	35 35	·0142	·0129	·0117
10 70	·0104	·0095	·0087	35 40	·0155	·0141	·0129
10 80	·0105	·0096	·0089	35 45	·0167	·0153	·0141
10 90	·0106	·0097	·0090	35 50	·0178	·0165	·0152
15 15	·0073	·0063	·0054	35 55	·0189	·0175	·0163
15 20	·0079	·0068	·0059	35 60	·0197	·0184	·0172
15 25	·0084	·0074	·0064	35 70	·0209	·0197	·0185
15 30	·0090	·0079	·0069	35 80	·0216	·0204	·0193
15 35	·0095	·0084	·0074	35 90	·0218	·0207	·0196
15 40	·0100	·0089	·0079	40 40	·0171	·0157	·0144
15 45	·0104	·0093	·0084	40 45	·0187	·0173	·0160
15 50	·0108	·0098	·0088	40 50	·0203	·0188	·0175
15 55	·0112	·0102	·0092	40 55	·0216	·0202	·0189
15 60	·0115	·0105	·0096	40 60	·0228	·0214	·0201
15 70	·0120	·0110	·0101	40 70	·0246	·0232	·0220
15 80	·0122	·0112	·0104	40 80	·0254	·0241	·0229
15 90	·0122	·0113	·0105	40 90	·0258	·0245	·0234
20 20	·0086	·0075	·0066	45 45	·0208	·0193	·0180
20 25	·0093	·0082	·0072	45 50	·0229	·0214	·0200
20 30	·0099	·0088	·0078	45 55	·0249	·0234	·0219
20 35	·0106	·0094	·0084	45 60	·0266	·0251	·0237
20 40	·0112	·0100	·0090	45 70	·0291	·0277	·0264
20 45	·0118	·0106	·0096	45 80	·0304	·0291	·0278
20 50	·0123	·0112	·0102	45 90	·0310	·0297	·0284
20 55	·0128	·0117	·0107	50 50	·0257	·0241	·0227
20 60	·0132	·0121	·0111	50 55	·0284	·0268	·0254
20 70	·0138	·0127	·0118	50 60	·0310	·0294	·0279
20 80	·0141	·0131	·0122	50 70	·0348	·0333	·0319
20 90	·0142	·0132	·0124	50 80	·0369	·0354	·0341
25 25	·0101	·0089	·0079	50 90	·0377	·0364	·0351
25 30	·0109	·0097	·0086	55 55	·0322	·0305	·0290
25 35	·0117	·0105	·0094	55 60	·0358	·0342	·0326
25 40	·0125	·0113	·0101	55 70	·0419	·0403	·0388
25 45	·0132	·0120	·0109	55 80	·0453	·0438	·0424
25 50	·0139	·0127	·0116	55 90	·0468	·0454	·0440
25 55	·0145	·0133	·0122	60 60	·0409	·0393	·0376
25 60	·0150	·0138	·0127	60 70	·0503	·0486	·0470
25 70	·0157	·0146	·0136	60 80	·0562	·0546	·0532
25 80	·0160	·0150	·0140	60 90	·0590	·0575	·0561
25 90	·0162	·0152	·0142	70 70	·0700	·0682	·0665
30 30	·0119	·0107	·0096	70 80	·0872	·0855	·0838
30 35	·0129	·0117	·0105	70 90	·0975	·0959	·0944
30 40	·0139	·0126	·0115	80 80	·1262	·1244	·1225
30 45	·0149	·0136	·0124	80 90	·1613	·1595	·1577
30 50	·0157	·0144	·0133	90 90	·2478	·2454	·2431

For explanation see pp. 31, 32

Value of the Reversion to a Perpetuity on the Death of the FIRST of Two Lives

Ages	NORTHAMPTON			HEALTHY MALES			Ages
	3 %	4 %	5 %	3 %	3½ %	4 %	
15 15	18·113	11·589	8·036	13·467	10·208	7·957	15 15
20 20	19·200	12·465	8·768	14·752	11·316	8·919	20 20
25 25	19·950	13·056	9·236	15·763	12·176	9·654	25 25
30 30	20·744	13·687	9·745	16·960	13·215	10·560	30 30
35 35	21·611	14·388	10·320	18·238	14·338	11·550	35 35
40 40	22·569	15·180	10·984	19·623	15·572	12·652	40 40
45 45	23·557	16·010	11·688	21·171	16·974	13·924	45 45
50 50	24·619	16·919	12·478	22·791	18·459	15·290	50 50
55 55	25·652	17·821	13·265	24·466	20·017	16·740	55 55
60 60	26·727	18·774	14·112	26·134	21·588	18·221	60 60
65 65	27·862	19·799	15·040	27·681	23·060	19·623	65 65
70 70	29·072	20·913	16·070	29·111	24·434	20·944	70 70
75 75	30·219	21·985	17·083	30·346	25·632	22·107	75 75
80 80	31·211	22·932	17·982	31·285	26·549	23·003	80 80
85 85	32·024	23·661	18·744	31·931	27·184	23·627	85 85

Value of the Reversion to a Perpetuity on the Death of the LAST of Two Lives

Ages	NORTHAMPTON			HEALTHY MALES			Ages
	3 %	4 %	5 %	3 %	3½ %	4 %	
15 15	9·318	4·829	2·784	6·883	4·636	3·210	15 15
20 20	10·190	5·469	3·218	7·830	5·378	3·793	20 20
25 25	11·088	6·068	3·630	8·828	6·169	4·424	25 25
30 30	12·078	6·751	4·111	9·972	7·096	5·178	30 30
35 35	13·179	7·534	4·676	11·254	8·155	6·056	35 35
40 40	14·401	8·426	5·342	12·691	9·366	7·078	40 40
45 45	15·725	9·424	6·102	14·308	10·755	8·275	45 45
50 50	17·175	10·553	6·984	16·084	12·309	9·638	50 50
55 55	18·714	11·777	7·971	18·013	14·029	11·175	55 55
60 60	20·385	13·148	9·104	20·060	15·885	12·861	60 60
65 65	22·196	14·639	10·408	22·149	17·810	14·637	65 65
70 70	24·126	16·365	11·884	24·243	19·769	16·470	70 70
75 75	26·049	18·053	13·429	26·198	21·622	18·228	75 75
80 80	27·893	19·782	14·988	27·897	23·250	19·788	80 80
85 85	29·402	21·253	16·314	29·258	24·564	21·058	85 85

For explanation see

Value of an Annuity during the Life of y after the Death of x

Age of x	Age of y	NORTHAMPTON 3 %	CARLISLE 3 %	HEALTHY MALES		
				3 %	$3\frac{1}{2}$ %	4 %
45	20	7·271	7·487	7·849	6·790	5·904
45	25	6·650	6·711	7·025	6·126	5·366
45	30	5·998	5·906	6·136	5·397	4·766
45	35	5·315	5·102	5·225	4·639	4·132
45	40	4·612	4·275	4·314	3·868	3·479
60	20	10·042	11·912	12·392	10·940	9·702
60	30	8·544	10·027	10·382	9·284	8·332
60	35	7·711	9·023	9·233	8·316	7·513
60	40	6·822	7·919	8·006	7·265	6·611
60	50	4·975	5·574	5·410	4·990	4·612
75	30	12·157	14·343	15·008	13·665	12·486
75	40	10·191	12·028	12·389	11·422	10·557
75	50	7·964	9·281	9·281	8·672	8·117
75	60	5·588	5·993	6·003	5·688	5·395
75	70	3·135	3·319	3·147	3·023	2·906

Value of an Annuity during the Life of y, who is to be nominated at the Death of x

Age of x	Age of y at Death of x	NORTHAMPTON 3 %	CARLISLE 3 %	HEALTHY MALES		
				3 %	$3\frac{1}{2}$ %	4 %
45	10	12·393	12·473	12·994	10·762	8·998
45	25	10·763	11·024	11·387	9·564	8·094
45	30	10·253	10·460	10·782	9·103	7·740
45	35	9·690	9·888	10·120	8·591	7·341
45	40	9·066	9·232	9·391	8·018	6·888
60	10	14·863	16·308	16·918	14·544	12·598
60	30	12·296	13·676	14·038	12·302	10·837
60	35	11·621	12·929	13·177	11·610	10·279
60	40	10·873	12·071	12·228	10·836	9·644
60	50	9·218	10·181	10·021	8·989	8·091
75	10	17·751	19·863	20·708	18·340	16·348
75	30	14·685	16·657	17·183	15·512	14·063
75	50	11·010	12·400	12·266	11·335	10·499
75	60	8·831	9·311	9·252	8·657	8·113
75	70	6·338	6·582	6·305	5·968	5·657

Single Payment to secure £1 at the Death of x provided he dies before y, according to the NORTHAMPTON TABLE

x	y	3 %	x	y	3 %	x	y	3 %
15	15	·26366	50	20	·47767	65	35	·59587
20	10	·30838	50	30	·45221	65	40	·57855
20	20	·27962	50	40	·41378	65	45	·55766
25	15	·31846	50	50	·35853	65	50	·53073
25	25	·29054	55	15	·53896	65	55	·49904
30	10	·36038	55	25	·51226	65	60	·45822
30	20	·32987	55	35	·48319	65	65	·40576
30	30	·30210	55	45	·43830	70	10	·71527
35	15	·37643	55	55	·37357	70	15	·70284
35	25	·34755	60	10	·60306	70	20	·68822
35	35	·31472	60	20	·57287	70	25	·68087
40	10	·42717	60	30	·55136	70	30	·67236
40	20	·39579	60	40	·51734	70	35	·66139
40	30	·36815	60	50	·46567	70	40	·64650
40	40	·32868	60	60	·38923	70	45	·62843
45	15	·45053	65	10	·65695	70	50	·60461
45	25	·42208	65	15	·64308	70	55	·57691
45	35	·38980	65	20	·62784	70	60	·54027
45	45	·34306	65	25	·61920	70	65	·49029
50	10	·50891	65	30	·60899	70	70	·42338

Single Payment to secure £1 at the Death of x provided he dies before y, according to the CARLISLE TABLE

x	y	3 %	x	y	3 %	x	y	3 %
15	15	·2101	50	20	·4681	65	35	·6236
20	10	·2503	50	30	·4400	65	40	·6088
20	20	·2234	50	40	·3965	65	45	·5940
25	15	·2705	50	50	·3260	65	50	·5644
25	25	·2391	55	15	·5409	65	55	·5137
30	10	·3190	55	25	·5211	65	60	·4534
30	20	·2928	55	35	·4931	65	65	·3973
30	30	·2556	55	45	·4454	70	10	·7276
35	15	·3427	55	55	·3528	70	15	·7205
35	25	·3136	60	10	·6147	70	20	·7161
35	35	·2710	60	20	·5986	70	25	·7082
40	10	·3959	60	30	·5766	70	30	·6986
40	20	·3733	60	40	·5472	70	35	·6908
40	30	·3388	60	50	·4917	70	40	·6788
40	40	·2891	60	60	·3792	70	45	·6692
45	15	·4262	65	10	·6673	70	50	·6475
45	25	·4018	65	15	·6592	70	55	·6034
45	35	·3636	65	20	·6531	70	60	·5464
45	45	·3052	65	25	·6439	70	65	·4956
50	10	·4880	65	30	·6332	70	70	·4190

For explanation see p. 34

Single Payment to secure £1 at the Death of x provided he dies before y, according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages x y	3 %	3½ %	4 %	Ages x y	3 %	3½ %	4 %
15 15	·1961	·1726	·1530	45 15	·4483	·4091	·3746
15 25	·1638	·1467	·1322	45 20	·4343	·3969	·3638
15 35	·1318	·1204	·1105	45 25	·4211	·3856	·3540
15 45	·1014	·0944	·0882	45 30	·4022	·3693	·3399
15 55	·0730	·0690	·0655	45 35	·3778	·3480	·3213
15 70	·0359	·0347	·0336	45 40	·3466	·3207	·2975
20 15	·2326	·2101	·1831	45 45	·3083	·2870	·2678
20 20	·2148	·1913	·1715	45 55	·2217	·2094	·1982
20 30	·1785	·1619	·1475	45 70	·1068	·1033	·1000
20 40	·1412	·1306	·1212	50 15	·5045	·4655	·4307
20 50	·1061	·0999	·0943	50 20	·4917	·4541	·4205
20 60	·0744	·0713	·0683	50 25	·4808	·4445	·4120
20 70	·0476	·0461	·0447	50 30	·4647	·4303	·3995
25 15	·2662	·2358	·2101	50 35	·4433	·4115	·3828
25 20	·2482	·2209	·1979	50 40	·4146	·3861	·3603
25 25	·2296	·2059	·1857	50 45	·3769	·3524	·3302
25 35	·1860	·1697	·1556	50 50	·3319	·3121	·2940
25 45	·1416	·1318	·1231	50 60	·2303	·2196	·2097
25 55	·1011	·0959	·0911	50 70	·1388	·1342	·1300
25 70	·0520	·0504	·0489	55 15	·5643	·5268	·4925
30 15	·3057	·2720	·2434	55 20	·5524	·5160	·4828
30 20	·2881	·2574	·2312	55 25	·5439	·5082	·4758
30 25	·2697	·2422	·2187	55 30	·5304	·4961	·4649
30 30	·2470	·2234	·2031	55 35	·5124	·4800	·4505
30 40	·1955	·1799	·1662	55 40	·4877	·4579	·4305
30 50	·1430	·1342	·1262	55 45	·4531	·4266	·4023
30 60	·0970	·0927	·0886	55 50	·4092	·3868	·3661
30 70	·0603	·0585	·0567	55 55	·3563	·3384	·3219
35 15	·3486	·3123	·2811	55 70	·1850	·1790	·1734
35 20	·3321	·2983	·2693	60 15	·6264	·5911	·5588
35 25	·3148	·2841	·2573	60 20	·6154	·5809	·5493
35 30	·2922	·2650	·2412	60 25	·6086	·5747	·5436
35 35	·2656	·2424	·2221	60 30	·5976	·5647	·5345
35 45	·2039	·1892	·1762	60 35	·5832	·5516	·5226
35 55	·1426	·1349	·1277	60 40	·5630	·5331	·5057
35 70	·0705	·0683	·0662	60 45	·5332	·5060	·4808
40 15	·3956	·3574	·3243	60 50	·4934	·4694	·4471
40 20	·3804	·3443	·3129	60 60	·3806	·3650	·3504
40 25	·3651	·3314	·3019	60 70	·2484	·2409	·2336
40 30	·3438	·3132	·2864	70 20	·7370	·7098	·6840
40 35	·3174	·2905	·2669	70 30	·7263	·6995	·6744
40 40	·2858	·2633	·2433	70 40	·7058	·6803	·6563
40 50	·2121	·1986	·1863	70 50	·6598	·6371	·6155
40 60	·1408	·1342	·1280	70 60	·5681	·5503	·5335
40 70	·0844	·0817	·0791	70 70	·4239	·4131	·4028

For explanation see p. 34

Value of an Annuity for the Joint Continuance of Three Lives of Equal Ages according to the NORTHAMPTON TABLE

Ages	4 %	Ages	4 %	Ages	4 %
10 10 10	12·200	30 30 30	9·221	50 50 50	6·317
11 11 11	12·043	31 31 31	9·099	51 51 51	6·161
12 12 12	11·865	32 32 32	8·975	52 52 52	6·011
13 13 13	11·678	33 33 33	8·848	53 53 53	5·859
14 14 14	11·481	34 34 34	8·718	54 54 54	5·705
15 15 15	11·274	35 35 35	8·585	55 55 55	5·550
16 16 16	11·056	36 36 36	8·448	56 56 56	5·393
17 17 17	10·845	37 37 37	8·309	57 57 57	5·235
18 18 18	10·656	38 38 38	8·165	58 58 58	5·076
19 19 19	10·490	39 39 39	8·017	59 59 59	4·916
20 20 20	10·342	40 40 40	7·865	60 60 60	4·755
21 21 21	10·222	41 41 41	7·714	61 61 61	4·593
22 22 22	10·118	42 42 42	7·567	62 62 62	4·432
23 23 23	10·012	43 43 43	7·423	63 63 63	4·263
24 24 24	9·905	44 44 44	7·276	65 65 65	3·914
25 25 25	9·796	45 45 45	7·126	70 70 70	2·995
26 26 26	9·685	46 46 46	6·972	75 75 75	2·119
27 27 27	9·572	47 47 47	6·813	80 80 80	1·400
28 28 28	9·457	48 48 48	6·650	85 85 85	·782
29 29 29	9·340	49 49 49	6·482	90 90 90	·563

Value of an Annuity for the Joint Continuance of Three Lives according to the CARLISLE TABLE

Ages	3 %	Ages	3 %	Ages	3 %
0 25 30	8·460	25 50 55	7·959	50 75 80	2·499
1 26 31	9·684	26 51 56	7·689	51 76 81	2·349
2 27 32	10·257	27 52 57	7·411	52 77 82	2·220
3 28 33	10·726	28 53 58	7·133	53 78 83	2·086
4 29 34	10·930	29 54 59	6·870	54 79 84	1·942
5 30 35	11·056	30 55 60	6·626	55 80 85	1·796
6 31 36	11·063	31 56 61	6·405	56 81 86	1·652
7 32 37	11·009	32 57 62	6·183	57 82 87	1·530
8 33 38	10·910	33 58 63	5·959	58 83 88	1·437
9 34 39	10·780	34 59 64	5·734	59 84 89	1·334
10 35 40	10·632	35 60 65	5·519	60 85 90	1·184
11 36 41	10·479	36 61 66	5·318	61 86 91	1·109
12 37 42	10·331	37 62 67	5·112	62 87 92	1·095
13 38 43	10·182	38 63 68	4·900	63 88 93	1·117
14 39 44	10·029	39 64 69	4·673	64 89 94	1·111
15 40 45	9·877	40 65 70	4·439	65 90 95	1·064
16 41 46	9·732	41 66 71	4·192	66 91 96	1·055
17 42 47	9·588	42 67 72	3·953	67 92 97	1·070
18 43 48	9·438	43 68 73	3·729	68 93 98	1·100
19 44 49	9·270	44 69 74	3·520	69 94 99	1·081
20 45 50	9·088	45 70 75	3·336	70 95 100	·946
21 46 51	8·887	46 71 76	3·145	71 96 101	·756
22 47 52	8·676	47 72 77	2·971	72 97 102	·509
23 48 53	8·454	48 73 78	2·806	73 98 103	·230
24 49 54	8·215	49 74 79	2·637		

For explanation see p. 35

Value of an Annuity for the Joint Continuance of Three Lives of Equal Ages according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
0	11·534	10·633	9·850	50	8·621	8·320	8·036
1	16·013	14·760	13·669	51	8·312	8·030	7·764
2	17·358	16·004	14·824	52	8·004	7·740	7·492
3	18·100	16·696	15·470	53	7·696	7·451	7·219
4	18·534	17·107	15·859	54	7·389	7·161	6·945
5	18·833	17·393	16·134	55	7·085	6·873	6·673
6	19·006	17·567	16·305	56	6·783	6·587	6·401
7	19·072	17·642	16·386	57	6·483	6·303	6·131
8	19·046	17·633	16·391	58	6·187	6·021	5·862
9	18·946	17·555	16·332	59	5·895	5·742	5·597
10	18·787	17·424	16·222	60	5·607	5·468	5·334
11	18·589	17·257	16·079	61	5·325	5·197	5·075
12	18·361	17·060	15·910	62	5·048	4·931	4·820
13	18·110	16·843	15·720	63	4·777	4·671	4·569
14	17·846	16·612	15·518	64	4·512	4·416	4·324
15	17·572	16·372	15·305	65	4·254	4·167	4·084
16	17·300	16·132	15·093	66	4·004	3·925	3·850
17	17·030	15·895	14·884	67	3·760	3·690	3·622
18	16·773	15·669	14·683	68	3·525	3·462	3·401
19	16·526	15·452	14·492	69	3·297	3·241	3·186
20	16·293	15·248	14·312	70	3·078	3·028	2·979
21	16·073	15·055	14·142	71	2·868	2·823	2·779
22	15·861	14·870	13·979	72	2·665	2·626	2·587
23	15·656	14·691	13·823	73	2·472	2·437	2·402
24	15·453	14·514	13·668	74	2·287	2·256	2·226
25	15·251	14·337	13·513	75	2·111	2·083	2·057
26	15·046	14·159	13·356	76	1·943	1·919	1·896
27	14·837	13·976	13·194	77	1·784	1·764	1·743
28	14·623	13·787	13·028	78	1·634	1·616	1·598
29	14·404	13·593	12·857	79	1·492	1·476	1·460
30	14·179	13·394	12·681	80	1·358	1·344	1·331
31	13·947	13·189	12·497	81	1·232	1·220	1·208
32	13·710	12·978	12·309	82	1·114	1·104	1·094
33	13·467	12·761	12·114	83	1·004	·995	·987
34	13·218	12·538	11·914	84	·901	·894	·886
35	12·964	12·309	11·708	85	·806	·799	·793
36	12·704	12·075	11·497	86	·717	·711	·706
37	12·439	11·836	11·280	87	·635	·630	·626
38	12·167	11·590	11·057	88	·559	·555	·551
39	11·892	11·339	10·829	89	·490	·486	·483
40	11·612	11·084	10·596	90	·425	·423	·420
41	11·327	10·824	10·358	91	·368	·366	·363
42	11·037	10·559	10·115	92	·317	·315	·313
43	10·746	10·291	9·868	93	·266	·264	·263
44	10·449	10·018	9·616	94	·226	·225	·224
45	10·150	9·742	9·360	95	·187	·186	·185
46	9·847	9·462	9·101	96	·157	·157	·156
47	9·543	9·180	8·839	97	·146	·145	·145
48	9·237	8·895	8·573	98	·112	·112	·111
49	8·930	8·608	8·305	99	·087	·086	·086
				100	·015	·015	·015

For explanation see p. 35

Value of an Annuity during the Longest of Three Lives according to the NORTHAMPTON TABLE

Ages	3 %	4 %	Ages	3 %	4 %
10 10 10	26·642	21·938	20 40 40	22·762	19·259
10 10 30	25·812	21·400	20 40 60	21·697	18·582
10 10 50	25·340	20·835	20 45 45	22·008	18·741
10 10 70	25·007	20·781	20 45 65	21·123	18·134
10 20 20	25·707	21·263	20 50 50	21·396	18·380
10 20 40	24·645	20·606	20 50 70	20·594	17·704
10 20 60	24·292	20·333	20 55 55	20·948	18·013
10 25 25	25·077	20·944	20 55 75	20·273	17·350
10 25 45	24·401	20·491	20 60 60	20·491	17·671
10 25 65	23·905	20·077	20 65 65	19·983	17·242
10 30 30	24·785	20·635	20 70 70	19·606	16·916
10 30 50	23·780	20·021	30 30 30	23·266	19·625
10 30 70	23·472	19·746	30 30 50	21·896	18·793
10 35 35	24·217	20·380	30 30 70	21·376	18·357
10 35 55	23·251	19·628	30 35 35	22·485	19·250
10 35 75	23·029	19·426	30 35 55	21·141	18·233
10 40 40	23·746	19·851	30 35 75	20·713	17·887
10 40 60	22·878	19·351	30 40 40	21·814	18·628
10 45 45	23·271	19·495	30 40 60	20·570	17·815
10 45 65	22·462	19·035	30 45 45	21·062	18·241
10 50 50	22·647	19·202	30 45 65	19·902	17·298
10 50 70	22·028	18·664	30 50 50	20·227	17·585
10 55 55	22·341	18·958	30 50 70	19·267	16·783
10 55 75	21·768	18·484	30 55 55	19·670	17·164
10 60 60	22·004	18·705	30 55 75	18·651	16·263
10 65 65	21·464	18·225	30 60 60	19·107	16·708
10 70 70	21·308	18·110	30 65 65	18·251	15·971
15 25 25	24·773	20·776	30 70 70	18·045	15·805
15 25 45	23·932	20·192	40 40 40	20·909	17·996
15 25 65	23·375	19·723	40 40 60	19·414	16·997
15 35 35	23·738	20·078	40 45 45	20·011	17·501
15 35 55	22·687	19·263	40 45 65	18·601	16·364
15 35 75	22·407	19·007	40 50 50	19·020	16·731
15 45 45	22·681	19·114	40 50 70	17·817	15·736
15 45 65	21·783	18·581	40 55 55	18·291	16·174
15 55 55	21·639	18·508	40 55 75	17·264	15·303
15 55 75	21·032	17·984	40 60 60	17·567	15·590
15 65 65	20·781	17·800	40 65 65	16·583	14·747
20 20 20	25·152	20·836	40 70 70	16·237	14·464
20 20 40	23·941	20·185	50 50 50	17·913	15·866
20 20 60	23·372	19·740	50 50 70	16·358	14·633
20 25 25	24·430	20·557	50 55 55	16·953	15·165
20 25 45	23·488	19·904	50 55 75	15·618	14·040
20 25 65	22·867	19·369	50 60 60	15·994	14·394
20 30 30	23·980	20·116	50 65 65	14·823	13·398
20 30 50	22·795	19·390	50 70 70	14·269	12·935
20 30 70	22·390	19·045	60 60 60	14·602	13·194
20 35 35	23·282	19·782	60 65 65	13·163	12·065
20 35 55	22·129	18·900	60 70 70	12·280	11·319
20 35 75	21·805	18·602	70 70 70	10·540	9·817

Single Premium Conversion Table for Finding by Inspection the Present Value of £1 due at Death from the Value of an Annuity for Life

Value of Annuity	Value of £1 at Death				
	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	5 %
0	·97561	·97087	·96618	·96154	·95238
1	·95122	·94175	·93237	·92308	·90476
2	·92683	·91262	·89855	·88462	·85714
3	·90244	·88350	·86473	·84615	·80952
4	·87805	·85437	·83092	·80769	·76190
5	·85366	·82524	·79710	·76923	·71429
6	·82927	·79612	·76329	·73077	·66667
7	·80488	·76699	·72947	·69231	·61905
8	·78049	·73786	·69565	·65385	·57143
9	·75610	·70874	·66184	·61538	·52381
10	·73171	·67961	·62802	·57692	·47619
11	·70732	·65049	·59420	·53846	·42857
12	·68293	·62136	·56039	·50000	·38095
13	·65854	·59223	·52657	·46154	·33333
14	·63415	·56311	·49275	·42308	·28571
15	·60976	·53398	·45894	·38462	·23810
16	·58537	·50485	·42512	·34615	·19048
17	·56098	·47573	·39130	·30769	·14286
18	·53659	·44660	·35749	·26923	·09524
19	·51220	·41748	·32367	·23077	·04762
20	·48780	·38835	·28986	·19231	·00000
21	·46341	·35922	·25604	·15385	...
22	·43902	·33010	·22222	·11538	...
23	·41463	·30097	·18841	·07692	...
24	·39024	·27184	·15459	·03846	...
25	·36585	·24272	·12077	·00000	...
26	·34146	·21359	·08696	...	...
27	·31707	·18447	·05314	...	...
28	·29268	·15534	·01932	...	...
29	·26829	·12621	...	...	...

Difference of Annuity	Difference (subtractive) of Value of £1 at Death				
	$2\frac{1}{2}$ %	3 %	$3\frac{1}{2}$ %	4 %	5 %
·1	·00244	·00291	·00338	·00385	·00476
·2	·00488	·00583	·00676	·00769	·00952
·3	·00732	·00874	·01014	·01154	·01429
·4	·00976	·01165	·01353	·01538	·01905
·5	·01220	·01456	·01691	·01923	·02381
·6	·01463	·01748	·02029	·02308	·02857
·7	·01707	·02039	·02367	·02692	·03333
·8	·01951	·02330	·02705	·03077	·03810
·9	·02195	·02621	·03043	·03462	·04286

For explanation see pp. 35–39

Annual Premium Conversion Table for Finding by Inspection the Annual Premium to secure £1 at Death from the Value of an Annuity for Life. INTEREST 3 PER CENT.

Value of Annuity	Annual Premium									
	Decimals of Value of Annuity									
	·0	·1	·2	·3	·4	·5	·6	·7	·8	·9
0– 0·9	·9709	·8800	·8042	·7401	·6852	·6375	·5959	·5591	·5264	·4972
1– 1·9	·4709	·4471	·4254	·4057	·3875	·3709	·3555	·3412	·3280	·3157
2– 2·9	·3042	·2935	·2834	·2739	·2650	·2566	·2487	·2411	·2340	·2273
3– 3·9	·2209	·2148	·2090	·2034	·1981	·1931	·1883	·1836	·1792	·1750
4– 4·9	·1709	·1670	·1632	·1596	·1561	·1527	·1494	·1463	·1433	·1404
5– 5·9	·1375	·1348	·1322	·1296	·1271	·1247	·1224	·1201	·1179	·1158
6– 6·9	·1137	·1117	·1098	·1079	·1060	·1042	·1025	·1007	·0991	·0975
7– 7·9	·0959	·0943	·0928	·0914	·0899	·0885	·0872	·0858	·0845	·0832
8– 8·9	·0820	·0808	·0796	·0784	·0773	·0761	·0750	·0740	·0729	·0719
9– 9·9	·0709	·0699	·0689	·0680	·0670	·0661	·0652	·0643	·0635	·0626
10–10·9	·0618	·0610	·0602	·0594	·0586	·0578	·0571	·0563	·0556	·0549
11–11·9	·0542	·0535	·0528	·0522	·0515	·0509	·0502	·0496	·0490	·0484
12–12·9	·0478	·0472	·0466	·0461	·0455	·0449	·0444	·0439	·0433	·0428
13–13·9	·0423	·0418	·0413	·0408	·0403	·0398	·0394	·0389	·0384	·0380
14–14·9	·0375	·0371	·0367	·0362	·0358	·0354	·0350	·0346	·0342	·0338
15–15·9	·0334	·0330	·0326	·0322	·0318	·0315	·0311	·0308	·0304	·0300
16–16·9	·0297	·0294	·0290	·0287	·0283	·0280	·0277	·0274	·0271	·0267
17–17·9	·0264	·0261	·0258	·0255	·0252	·0249	·0246	·0243	·0241	·0238
18–18·9	·0235	·0232	·0230	·0227	·0224	·0222	·0219	·0216	·0214	·0211
19–19·9	·0209	·0206	·0204	·0201	·0199	·0197	·0194	·0192	·0190	·0187
20–20·9	·0185	·0183	·0180	·0178	·0176	·0174	·0172	·0170	·0167	·0165
21–21·9	·0163	·0161	·0159	·0157	·0155	·0153	·0151	·0149	·0147	·0145
22–22·9	·0144	·0142	·0140	·0138	·0136	·0134	·0132	·0131	·0129	·0127
23–23·9	·0125	·0124	·0122	·0120	·0119	·0117	·0115	·0114	·0112	·0110
24–24·9	·0109	·0107	·0106	·0104	·0102	·0101	·0099	·0098	·0096	·0095
25–25·9	·0093	·0092	·0090	·0089	·0088	·0086	·0085	·0083	·0082	·0080
26–26·9	·0079	·0078	·0076	·0075	·0074	·0072	·0071	·0070	·0068	·0067
27–27·9	·0066	·0065	·0063	·0062	·0061	·0060	·0058	·0057	·0056	·0055
28–28·9	·0054	·0052	·0051	·0050	·0049	·0048	·0047	·0045	·0044	·0043
29–29·9	·0042	·0041	·0040	·0039	·0038	·0037	·0036	·0034	·0033	·0032
30–30·9	·0031	·0030	·0029	·0028	·0027	·0026	·0025	·0024	·0023	·0022
31–31·9	·0021	·0020	·0019	·0018	·0017	·0016	·0015	·0015	·0014	·0013
32–32·9	·0012	·0011	·0010	·0009	·0008	·0007	·0006	·0005	·0005	·0004
33–33·9	·0003	·0002	·0001	·0000	...	...	...	...	...	...

For interest at	1	1¼	1½	1¾	per cent.
add	·0192	·0168	·0143	·0119	
For interest at	2	2¼	2½	2¾	,,
add	·0095	·0071	·0047	·0024	
For interest at	3	3¼	3½	3¾	,,
subtract	·0000	·0024	·0047	·0070	
For interest at	4	4¼	4½	4¾	,,
subtract	·0093	·0116	·0139	·0162	
For interest at	5	6	7	8	,,
subtract	·0185	·0275	·0363	·0449	

For explanation see pp. 35–39

RATES

ANNUITIES AND ASSURANCES

CHARGES BY GOVERNMENT

AND BY

BRITISH LIFE OFFICES

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COST OF IMMEDIATE LIFE ANNUITIES OF £1

Age Next Birth-day	Males			Females			Age Next Birth-day	Males			Females		
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
6	25	19	0	27	12	6	46	16	9	11	18	6	9
7	25	15	1	27	9	1	47	16	4	2	18	0	0
8	25	11	1	27	5	8	48	15	18	3	17	13	2
9	25	7	0	27	2	2	49	15	12	3	17	6	1
10	25	2	11	26	18	8	50	15	6	1	16	18	11
11	24	18	10	26	15	1	51	14	19	11	16	11	9
12	24	14	9	26	11	6	52	14	13	6	16	4	7
13	24	10	6	26	7	10	53	14	7	1	15	17	4
14	24	6	4	26	4	1	54	14	0	5	15	9	11
15	24	2	1	26	0	4	55	13	13	8	15	2	4
16	23	17	10	25	16	6	56	13	6	9	14	14	9
17	23	13	6	25	12	7	57	12	19	8	14	6	11
18	23	9	1	25	8	8	58	12	12	5	13	19	1
19	23	4	9	25	4	8	59	12	4	11	13	11	1
20	23	0	4	25	0	8	60	11	17	4	13	3	1
21	22	15	10	24	16	6	61	11	9	8	12	15	1
22	22	11	4	24	12	4	62	11	2	2	12	7	0
23	22	6	9	24	8	1	63	10	14	11	11	19	0
24	22	2	3	24	3	10	64	10	7	8	11	11	0
25	21	17	7	23	19	5	65	10	0	6	11	2	11
26	21	12	11	23	15	0	66	9	13	4	10	14	7
27	21	8	3	23	10	6	67	9	6	4	10	6	4
28	21	3	6	23	5	11	68	8	19	7	9	18	1
29	20	18	9	23	1	3	69	8	12	10	9	9	10
30	20	13	11	22	16	6	70	8	6	2	9	1	10
31	20	9	1	22	11	8	71	7	19	5	8	14	2
32	20	4	2	22	6	9	72	7	12	10	8	6	10
33	19	19	2	22	1	9	73	7	6	4	7	19	10
34	19	14	2	21	16	7	74	7	0	1	7	13	0
35	19	9	2	21	11	5	75	6	14	1	7	6	4
36	19	4	1	21	6	2	76	6	8	4	6	19	10
37	18	18	11	21	0	9	77	6	2	8	6	13	7
38	18	13	9	20	15	3	78	5	17	4	6	7	5
39	18	8	6	20	9	7	79	5	12	3	6	1	6
40	18	3	2	20	3	11	80	5	7	2	5	15	9
41	17	17	10	19	18	0	81 or over	5	2	4	5	10	3
42	17	12	4	19	12	1							
43	17	6	10	19	5	11							
44	17	1	4	18	19	8							
45	16	15	8	18	13	3							

For explanation see pp. 39, 40

COST OF DEFERRED LIFE ANNUITIES.
Money Returnable

Age Next Birthday	Years Deferred	Annual Payment Males	Annual Payment Females	Single Payment Males	Single Payment Females
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
10	10	1 16 11	2 0 2	17 19 7	19 11 1
10	20	0 15 3	0 16 10	12 12 7	13 18 7
10	30	0 7 11	0 8 10	8 13 2	9 12 7
10	40	0 4 5	0 4 11	5 14 0	6 6 3
10	50	0 2 5	0 2 8	3 9 1	3 16 7
15	10	1 15 1	1 18 5	17 1 10	18 14 6
15	20	0 14 4	0 15 11	11 17 6	13 3 4
15	30	0 7 4	0 8 2	8 0 1	8 18 0
15	40	0 3 11	0 4 4	5 1 11	5 12 8
15	50	0 2 0	0 2 3	2 18 4	3 4 10
20	10	1 13 2	1 16 7	16 3 4	17 16 7
20	20	0 13 5	0 14 11	11 1 7	12 6 6
20	30	0 6 8	0 7 5	7 6 0	8 1 7
20	35	0 4 10	0 5 4	5 15 4	6 7 5
20	40	0 3 5	0 3 10	4 8 5	4 18 0
20	45	0 2 5	0 2 8	3 6 0	3 13 5
25	10	1 11 3	1 14 7	15 4 0	16 17 0
25	20	0 12 5	0 13 9	10 4 10	11 7 10
25	25	0 8 6	0 9 5	8 5 2	9 2 10
25	30	0 6 0	0 6 7	6 10 6	7 4 2
25	35	0 4 2	0 4 8	5 0 0	5 10 11
25	40	0 2 11	0 3 3	3 14 8	4 3 0
30	10	1 9 2	1 12 5	14 3 9	15 15 6
30	15	0 17 4	0 19 4	11 11 9	12 17 9
30	20	0 11 4	0 12 6	9 6 10	10 6 10
30	25	0 7 8	0 8 5	7 7 7	8 3 1
30	30	0 5 2	0 5 9	5 13 2	6 5 5
30	35	0 3 6	0 3 11	4 4 6	4 13 11
30	40	0 2 5	0 2 8	3 1 11	3 7 9
35	10	1 6 11	1 9 11	13 2 3	14 11 7
35	15	0 15 10	0 17 6	10 11 4	11 14 0
35	20	0 10 1	0 11 2	8 7 0	9 4 6
35	25	0 6 8	0 7 4	6 8 0	7 1 11
35	30	0 4 5	0 4 11	4 15 7	5 6 3
35	35	0 2 11	0 3 3	3 10 0	3 16 8
40	10	1 4 7	1 7 2	11 19 2	13 4 10
40	15	0 14 2	0 15 8	9 8 11	10 8 9
40	20	0 8 9	0 9 9	7 4 10	8 0 7
40	25	0 5 7	0 6 3	5 8 2	6 0 3
40	30	0 3 8	0 4 0	3 19 3	4 6 9
45	10	1 2 0	1 4 3	10 13 9	11 16 3
45	15	0 12 3	0 13 7	8 3 10	9 1 8
45	20	0 7 5	0 8 3	6 2 4	6 16 0
45	25	0 4 8	0 5 1	4 9 8	4 18 1
50	10	0 19 1	1 1 1	9 5 5	10 5 6
50	15	0 10 5	0 11 6	6 18 5	7 13 11
50	20	0 6 2	0 6 9	5 1 5	5 11 0
55	10	0 16 1	0 17 11	7 16 8	8 14 1
55	15	0 8 7	0 9 5	5 14 9	6 5 7
60	10	0 13 4	0 14 7	6 9 10	7 2 1

COST OF DEFERRED LIFE ANNUITIES.
Money not Returnable

Age Next Birthday	Years Deferred	Annual Payment		Single Payment	
		Males	Females	Males	Females
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
10	10	1 15 1	1 18 6	16 11 10	18 6 7
10	20	0 13 7	0 15 4	10 9 8	12 1 2
10	30	0 6 5	0 7 6	6 5 0	7 11 3
10	40	0 3 1	0 3 10	3 8 6	4 8 1
10	50	0 1 5	0 1 10	1 12 9	2 4 11
15	10	1 13 1	1 16 9	15 11 10	17 8 8
15	20	0 12 6	0 14 5	9 11 10	11 4 6
15	30	0 5 9	0 6 10	5 10 1	6 16 3
15	40	0 2 8	0 3 4	2 16 11	3 15 0
15	50	0 1 1	0 1 5	1 4 2	1 14 5
20	10	1 11 1	1 14 10	14 10 11	16 9 6
20	20	0 11 6	0 13 4	8 13 5	10 6 8
20	30	0 5 0	0 6 1	4 15 1	6 0 3
20	35	0 3 4	0 4 2	3 7 2	4 7 9
20	40	0 2 2	0 2 9	2 5 4	3 1 4
20	45	0 1 4	0 1 9	1 8 7	2 0 4
25	10	1 8 11	1 12 9	13 9 4	15 8 10
25	20	0 10 4	0 12 2	7 14 7	9 7 6
25	25	0 6 8	0 8 0	5 13 0	7 1 4
25	30	0 4 4	0 5 4	3 19 10	5 3 2
25	35	0 2 9	0 3 5	2 13 11	3 12 1
25	40	0 1 8	0 2 2	1 13 11	2 7 4
30	10	1 6 9	1 10 6	12 6 10	14 6 5
30	15	0 15 1	0 17 6	9 5 1	11 1 2
30	20	0 9 3	0 10 11	6 15 4	8 6 9
30	25	0 5 9	0 7 0	4 15 8	6 1 8
30	30	0 3 7	0 4 5	3 4 7	4 5 0
30	35	0 2 2	0 2 9	2 0 8	2 15 10
30	40	0 1 2	0 1 7	1 3 0	1 13 7
35	10	1 4 5	1 8 0	11 3 6	13 2 1
35	15	0 13 6	0 15 9	8 3 4	9 17 7
35	20	0 8 0	0 9 6	5 15 6	7 4 2
35	25	0 4 10	0 5 10	3 18 0	5 0 9
35	30	0 2 10	0 3 6	2 9 1	3 6 2
35	35	0 1 6	0 2 0	1 7 9	1 19 9
40	10	1 2 0	1 5 3	9 19 2	11 15 3
40	15	0 11 10	0 13 10	7 0 10	8 11 8
40	20	0 6 9	0 8 0	4 15 1	6 0 0
40	25	0 3 10	0 4 8	2 19 10	3 18 10
40	30	0 2 0	0 2 7	1 13 10	2 7 4
45	10	0 19 4	1 2 2	8 13 7	10 5 6
45	15	0 10 0	0 11 8	5 17 2	7 3 7
45	20	0 5 4	0 6 5	3 13 9	4 14 4
45	25	0 2 9	0 3 5	2 1 8	2 16 8
50	10	0 16 7	0 18 11	7 6 3	8 13 0
50	15	0 8 0	0 9 5	4 12 0	5 13 8
50	20	0 3 11	0 4 10	2 12 0	3 8 3
55	10	0 13 5	0 15 5	5 16 5	6 19 0
55	15	0 5 11	0 7 2	3 5 9	4 3 5
60	10	0 10 0	0 11 10	4 4 6	5 3 11

For explanation see pp. 39, 40

SINGLE PREMIUMS FOR LIFE ASSURANCE FOR £100

Age at Entry	Sum Assured Payable				Age at Entry
	At Death	In 10 Years	In 15 Years	In 20 Years	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
16	37 5 0	80 4 6	71 13 0	64 7 0	16
17	37 19 6	80 5 6	71 14 6	64 9 6	17
18	38 13 6	80 6 6	71 16 6	64 12 0	18
19	39 6 6	80 7 6	71 17 6	64 13 6	19
20	39 19 0	80 8 0	71 18 6	64 15 0	20
21	40 11 0	80 8 0	71 19 0	64 16 0	21
22	41 3 0	80 8 6	71 19 6	64 17 0	22
23	41 15 0	80 8 6	72 0 0	64 17 6	23
24	42 7 6	80 8 6	72 0 6	64 19 0	24
25	43 1 0	80 9 0	72 1 0	65 0 0	25
26	43 14 6	80 9 6	72 2 0	65 1 6	26
27	44 8 6	80 10 0	72 3 0	65 3 6	27
28	45 2 6	80 10 6	72 4 0	65 5 0	28
29	45 17 0	80 11 0	72 5 0	65 7 0	29
30	46 11 6	80 11 6	72 6 0	65 8 6	30
31	47 6 0	80 11 6	72 7 0	65 10 6	31
32	48 1 0	80 12 6	72 8 0	65 12 6	32
33	48 16 0	80 13 0	72 9 6	65 15 0	33
34	49 11 6	80 13 6	72 10 6	65 17 0	34
35	50 7 6	80 14 0	72 12 0	66 0 0	35
36	51 3 6	80 14 6	72 13 6	66 2 6	36
37	51 19 6	80 15 0	72 15 0	66 5 6	37
38	52 16 0	80 16 0	72 16 6	66 8 6	38
39	53 13 0	80 16 6	72 18 6	66 11 6	39
40	54 10 0	80 17 6	73 0 6	66 15 6	40
41	55 7 0	80 18 0	73 2 6	66 19 0	41
42	56 5 0	80 19 0	73 5 0	67 3 6	42
43	57 3 0	81 0 6	73 7 6	67 8 6	43
44	58 1 6	81 2 0	73 10 0	67 14 0	44
45	59 0 6	81 3 0	73 14 0	67 19 6	45
46	59 19 6	81 5 0	73 17 0	68 6 0	46
47	60 18 6	81 6 6	74 1 0	68 12 6	47
48	61 17 6	81 8 0	74 5 0	68 19 6	48
49	62 17 0	81 10 0	74 9 0	69 7 0	49
50	63 16 6	81 12 0	74 13 6	69 14 6	50
51	64 16 0	81 14 0	74 18 6	70 3 0	51
52	65 16 0	81 16 6	75 4 0	70 12 6	52
53	66 16 0	81 19 0	75 9 6	71 2 0	53
54	67 16 0	82 2 0	75 16 0	71 12 6	54
55	68 16 6	82 5 0	76 3 0	72 4 0	55
56	69 16 6	...	...	...	56
57	70 17 0	...	...	...	57
58	71 17 6	...	...	...	58
59	72 18 0	...	...	...	59
60	73 18 0	...	...	...	60
61	74 18 0	...	...	...	61
62	75 18 0	...	...	...	62
63	76 18 0	...	...	...	63
64	77 17 0	..	...	...	64
65	78 16 6	...	...	...	65

For explanation see pp. 39, 40

SINGLE PREMIUMS FOR LIFE ASSURANCE FOR £100

Age at Entry	Sum Assured Payable				Age at Entry
	In 25 Years	In 30 Years	In 35 Years	In 40 Years	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
16	58 3 6	53 0 0	48 14 0	45 4 6	16
17	58 7 0	53 4 6	48 19 6	45 10 6	17
18	58 10 0	53 8 0	49 4 6	45 17 0	18
19	58 12 6	53 11 6	49 8 6	46 2 0	19
20	58 14 6	53 14 0	49 12 6	46 7 0	20
21	58 16 0	53 16 6	49 15 6	46 11 6	21
22	58 17 6	53 19 0	49 19 0	46 16 0	22
23	58 19 0	54 1 0	50 2 6	47 1 0	23
24	59 1 0	54 4 0	50 6 6	47 6 6	24
25	59 3 0	54 7 0	50 10 6	47 12 6	25
26	59 5 6	54 10 6	50 15 6	47 19 0	26
27	59 8 0	54 14 6	51 1 0	48 6 0	27
28	59 10 6	54 18 6	51 6 6	48 13 6	28
29	59 13 6	55 2 6	51 12 6	49 1 6	29
30	59 16 6	55 7 0	51 18 6	49 10 0	30
31	59 19 6	55 11 6	52 5 0	49 18 6	31
32	60 3 0	55 16 6	52 12 0	50 8 0	32
33	60 6 6	56 2 0	52 19 6	50 17 6	33
34	60 10 0	56 7 6	53 8 0	51 8 0	34
35	60 14 6	56 14 0	53 16 6	51 19 0	35
36	60 19 0	57 0 6	54 5 6	52 11 0	36
37	61 3 6	57 7 6	54 15 0	53 3 0	37
38	61 8 6	57 15 0	55 5 0	53 16 0	38
39	61 14 0	58 3 0	55 16 0	54 9 6	39
40	62 0 0	58 11 6	56 7 6	55 3 6	40
41	62 6 0	59 1 0	56 19 6	...	41
42	62 13 0	59 11 0	57 13 0	...	42
43	63 1 0	60 1 6	58 7 0	...	43
44	63 9 6	60 13 0	59 1 6	...	44
45	63 18 0	61 5 6	59 17 0	...	45
46	64 7 6	61 18 6	...	...	46
47	64 17 6	62 12 0	...	...	47
48	65 8 0	63 6 0	...	...	48
49	65 19 0	64 0 6	...	...	49
50	66 10 6	64 16 0	...	...	50
51	67 3 0	...	...	...	51
52	67 16 6	...	...	...	52
53	68 10 6	...	...	...	53
54	69 5 6	...	...	...	54
55	70 1 0	...	...	...	55

ANNUAL PREMIUMS FOR LIFE ASSURANCE FOR £100

Age at Entry	Sums Assured Payable at					Age at Entry
	Death	Death	Age 55	Age 60	Age 65	
	Premiums Payable Annually till					
	Death	Age 50	Age 55	Age 60	Age 65	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
16	1 9 6	1 12 0	2 1 6	1 17 0	1 14 0	16
17	1 10 6	1 13 0	2 3 0	1 18 6	1 15 0	17
18	1 11 6	1 14 6	2 4 6	1 19 6	1 16 0	18
19	1 12 0	1 15 6	2 6 0	2 1 0	1 17 6	19
20	1 13 0	1 16 6	2 8 0	2 2 6	1 18 6	20
21	1 14 0	1 17 6	2 9 6	2 3 6	1 19 6	21
22	1 14 6	1 18 6	2 11 6	2 5 0	2 0 6	22
23	1 15 6	1 19 6	2 13 0	2 6 6	2 2 0	23
24	1 16 6	2 1 0	2 15 0	2 8 0	2 3 0	24
25	1 17 6	2 2 6	2 17 6	2 9 6	2 4 6	25
26	1 18 6	2 3 6	2 19 6	2 11 6	2 6 0	26
27	1 19 6	2 5 0	3 2 0	2 13 6	2 7 6	27
28	2 0 6	2 7 0	3 5 0	2 15 6	2 9 0	28
29	2 1 6	2 8 6	3 7 6	2 17 6	2 10 6	29
30	2 3 0	2 10 0	3 11 0	2 19 6	2 12 6	30
31	2 4 0	2 12 0	3 14 0	3 2 0	2 14 0	31
32	2 5 6	2 14 0	3 17 6	3 4 6	2 16 0	32
33	2 6 6	2 16 0	4 1 6	3 7 6	2 18 6	33
34	2 8 0	2 18 6	4 6 0	3 10 0	3 0 6	34
35	2 9 6	3 1 0	4 10 6	3 13 6	3 3 0	35
36	2 11 0	3 3 6	4 15 6	3 17 0	3 5 6	36
37	2 13 0	3 6 6	5 1 6	4 0 6	3 8 0	37
38	2 14 6	3 9 6	5 7 6	4 4 6	3 11 0	38
39	2 16 6	3 13 0	5 14 6	4 9 6	3 14 0	39
40	2 18 0	3 16 6	6 2 6	4 13 6	3 17 6	40
41	3 0 0	4 0 6	6 11 6	4 19 0	4 1 0	41
42	3 2 6	4 5 0	7 1 6	5 4 6	4 5 0	42
43	3 4 6	4 10 0	7 13 6	5 11 0	4 9 0	43
44	3 7 0	4 15 6	8 7 6	5 18 6	4 13 6	44
45	3 9 6	5 1 6	9 3 6	6 6 6	4 19 0	45
46	3 12 0	5 8 6	...	6 16 0	5 4 6	46
47	3 15 0	5 16 0	...	7 6 0	5 10 6	47
48	3 17 6	6 5 0	...	7 18 0	5 17 0	48
49	4 1 0	6 15 6	...	8 12 0	6 4 6	49
50	4 4 0	7 7 6	...	9 8 6	6 13 0	50
51	4 7 6	...	...	...	7 2 6	51
52	4 11 0	...	...	...	7 13 0	52
53	4 15 0	...	...	...	8 5 6	53
54	4 19 6	...	...	...	8 19 6	54
55	5 4 0	...	...	...	9 16 6	55
56	5 8 6	...	...	...	...	56
57	5 13 6	...	...	...	...	57
58	5 19 0	...	...	...	...	58
59	6 4 6	...	...	...	...	59
60	6 10 6	...	...	...	...	60
61	6 17 0	...	...	...	.	61
62	7 4 0	...	...	...	...	62
63	7 11 6	...	...	...	...	63
64	7 19 0	...	...	...	...	64
65	8 7 0	...	...	...	...	65

IMMEDIATE LIFE ANNUITIES

Granted through the National Debt Office for £100 of 2½ per Cent. Stock when the Price of £100 Stock is above £99 10s. 1d.

Age of the Nominee	Male £	s.	d.	Female £	s.	d.	Age of the Nominee	Male £	s.	d.	Female £	s.	d.
16	4	4	0	3	17	7	51	6	15	1	6	2	3
17	4	4	9	3	18	3	52	6	18	1	6	5	0
18	4	5	7	3	18	10	53	7	1	5	6	8	0
19	4	6	5	3	19	6	54	7	4	10	6	11	2
20	4	7	3	4	0	1	55	7	8	7	6	14	6
21	4	8	1	4	0	10	56	7	12	7	6	18	2
22	4	9	0	4	1	6	57	7	16	11	7	2	1
23	4	9	11	4	2	3	58	8	1	8	7	6	2
24	4	10	10	4	3	0	59	8	6	10	7	10	7
25	4	11	10	4	3	9	60	8	12	4	7	15	3
26	4	12	10	4	4	6	61	8	18	0	8	0	4
27	4	13	10	4	5	4	62	9	4	0	8	5	8
28	4	14	11	4	6	3	63	9	10	4	8	11	4
29	4	16	0	4	7	1	64	9	17	1	8	17	6
30	4	17	2	4	8	0	65	10	4	4	9	4	3
31	4	18	4	4	9	0	66	10	11	10	9	11	6
32	4	19	6	4	10	0	67	10	19	9	9	19	6
33	5	0	10	4	11	1	68	11	8	2	10	7	11
34	5	2	1	4	12	2	69	11	17	2	10	17	0
35	5	3	5	4	13	4	70	12	7	0	11	6	6
36	5	4	10	4	14	6	71	12	17	6	11	16	3
37	5	6	4	4	15	9	72	13	8	9	12	6	6
38	5	7	10	4	17	0	73	14	0	7	12	17	4
39	5	9	4	4	18	5	74	14	13	0	13	8	9
40	5	11	0	4	19	10	75	15	5	10	14	1	0
41	5	12	8	5	1	4	76	15	19	7	14	14	0
42	5	14	6	5	3	0	77	16	13	10	15	7	11
43	5	16	4	5	4	8	78	17	8	10	16	2	8
44	5	18	3	5	6	5	79	18	4	10	16	18	5
45	6	0	4	5	8	4	80	19	1	9	17	15	0
46	6	2	5	5	10	4							
47	6	4	8	5	12	6							
48	6	7	1	5	14	9							
49	6	9	7	5	17	1							
50	6	12	3	5	19	8							

Life annuities are payable quarterly at the National Debt Office by warrant on the Bank of England.

The warrants may be received at the National Debt Office either on personal demand or by power of attorney, or they can be transmitted by post to the proprietor at his or her own risk.

Life annuities are transferable, but cannot be transferred in parts or shares, nor can the original nominee ever be changed.

AVERAGE RATES FOR ANNUITIES AND ASSURANCES CHARGED BY BRITISH LIFE OFFICES.
Annuity Granted for each £100 of Purchase Money

Age	Males	Females	Age	Males	Females
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
40	5 16 7	5 6 4	55	7 14 10	7 0 5
41	5 18 4	5 7 9	56	7 18 10	7 4 0
42	6 0 1	5 9 3	57	8 3 2	7 7 8
43	6 1 11	5 10 9	58	8 7 11	7 12 1
44	6 3 11	5 12 5	59	8 13 0	7 16 6
45	6 5 11	5 14 2	60	8 18 5	8 1 0
46	6 8 1	5 16 1	61	9 4 3	8 6 3
47	6 10 4	5 18 2	62	9 10 4	8 11 10
48	6 12 10	6 0 4	63	9 16 10	8 16 6
49	6 15 6	6 2 9	64	10 3 7	9 3 8
50	6 18 3	6 5 3	65	10 11 1	9 10 4
51	7 1 2	6 7 10	66	10 18 8	9 18 1
52	7 4 3	6 10 7	67	11 6 9	10 5 3
53	7 7 7	6 13 7	68	11 15 2	10 13 8
54	7 11 2	6 16 10	70	12 14 3	11 11 9

Annual Premium for Assurance of £100 at Death

Age	With Profits	Without Profits	Age	With Profits	Without Profits
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
21	1 19 6	1 13 8	41	3 6 9	2 17 10
22	2 0 3	1 14 4	42	3 8 8	2 19 10
23	2 1 2	1 15 1	43	3 10 11	3 1 11
24	2 2 1	1 15 11	44	3 13 3	3 4 2
25	2 3 1	1 16 7	45	3 15 9	3 6 7
26	2 4 1	1 17 6	46	3 18 5	3 9 0
27	2 5 2	1 18 5	47	4 1 3	3 11 8
28	2 6 6	1 19 5	48	4 4 1	3 14 5
29	2 7 6	2 0 6	49	4 7 8	3 17 4
30	2 8 9	2 1 7	50	4 11 6	4 0 7
31	2 10 0	2 2 9	51	4 14 9	4 4 2
32	2 11 3	2 3 11	52	4 18 7	4 7 9
33	2 12 8	2 5 2	53	5 2 9	4 11 8
34	2 14 1	2 6 5	54	5 7 2	4 15 11
35	2 15 8	2 7 9	55	5 12 0	5 0 3
36	2 17 3	2 9 3	56	5 17 1	5 5 0
37	2 18 11	2 10 10	57	6 2 7	5 10 1
38	3 0 8	2 12 5	58	6 8 4	5 15 5
39	3 2 7	2 14 2	59	6 14 5	6 1 0
40	3 4 6	2 15 11	60	7 0 8	6 6 8

Annual Premiums for Endowment Assurance of £100

Age at Entry	Years to Maturity	With Profits	Without Profits	Age at Entry	Years to Maturity	With Profits	Without Profits
		£ s. d.	£ s. d.			£ s. d.	£ s. d.
25	30	3 5 0	2 16 9	35	30	3 10 10	3 2 2
25	35	2 16 1	2 9 0	40	15	7 0 2	6 6 1
25	40	2 10 10	2 3 10	40	20	5 5 10	4 14 2
30	25	4 0 0	3 9 5	40	25	4 7 0	3 16 9
30	30	3 7 5	2 18 11	45	10	10 13 6	9 15 10
30	35	2 19 6	2 11 4	45	15	7 4 1	6 9 6
35	20	5 2 6	4 11 0	45	20	5 11 2	4 19 9
35	25	4 2 9	3 13 0				

For explanation see p. 40

INCOME TAX TABLES

At 5*d*., 6*d*., 7*d*., 8*d*., and 9*d*. in the Pound

For explanation see p. 40

£1–200

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	5	0	0	6	0	0	7	0	0	8	0	0	9
2	0	0	10	0	1	0	0	1	2	0	1	4	0	1	6
3	0	1	3	0	1	6	0	1	9	0	2	0	0	2	3
4	0	1	8	0	2	0	0	2	4	0	2	8	0	3	0
5	0	2	1	0	2	6	0	2	11	0	3	4	0	3	9
6	0	2	6	0	3	0	0	3	6	0	4	0	0	4	6
7	0	2	11	0	3	6	0	4	1	0	4	8	0	5	3
8	0	3	4	0	4	0	0	4	8	0	5	4	0	6	0
9	0	3	9	0	4	6	0	5	3	0	6	0	0	6	9
10	0	4	2	0	5	0	0	5	10	0	6	8	0	7	6
11	0	4	7	0	5	6	0	6	5	0	7	4	0	8	3
12	0	5	0	0	6	0	0	7	0	0	8	0	0	9	0
15	0	6	3	0	7	6	0	8	9	0	10	0	0	11	3
20	0	8	4	0	10	0	0	11	8	0	13	4	0	15	0
25	0	10	5	0	12	6	0	14	7	0	16	8	0	18	9
30	0	12	6	0	15	0	0	17	6	1	0	0	1	2	6
35	0	14	7	0	17	6	1	0	5	1	3	4	1	6	3
40	0	16	8	1	0	0	1	3	4	1	6	8	1	10	0
45	0	18	9	1	2	6	1	6	3	1	10	0	1	13	9
50	1	0	10	1	5	0	1	9	2	1	13	4	1	17	6
55	1	2	11	1	7	6	1	12	1	1	16	8	2	1	3
60	1	5	0	1	10	0	1	15	0	2	0	0	2	5	0
65	1	7	1	1	12	6	1	17	11	2	3	4	2	8	9
70	1	9	2	1	15	0	2	0	10	2	6	8	2	12	6
75	1	11	3	1	17	6	2	3	9	2	10	0	2	16	3
80	1	13	4	2	0	0	2	6	8	2	13	4	3	0	0
85	1	15	5	2	2	6	2	9	7	2	16	8	3	3	9
90	1	17	6	2	5	0	2	12	6	3	0	0	3	7	6
95	1	19	7	2	7	6	2	15	5	3	3	4	3	11	3
100	2	1	8	2	10	0	2	18	4	3	6	8	3	15	0
105	2	3	9	2	12	6	3	1	3	3	10	0	3	18	9
110	2	5	10	2	15	0	3	4	2	3	13	4	4	2	6
115	2	7	11	2	17	6	3	7	1	3	16	8	4	6	3
120	2	10	0	3	0	0	3	10	0	4	0	0	4	10	0
125	2	12	1	3	2	6	3	12	11	4	3	4	4	13	9
130	2	14	2	3	5	0	3	15	10	4	6	8	4	17	6
135	2	16	3	3	7	6	3	18	9	4	10	0	5	1	3
140	2	18	4	3	10	0	4	1	8	4	13	4	5	5	0
145	3	0	5	3	12	6	4	4	7	4	16	8	5	8	9
150	3	2	6	3	15	0	4	7	6	5	0	0	5	12	6
155	3	4	7	3	17	6	4	10	5	5	3	4	5	16	3
160	3	6	8	4	0	0	4	13	4	5	6	8	6	0	0
165	3	8	9	4	2	6	4	16	3	5	10	0	6	3	9
170	3	10	10	4	5	0	4	19	2	5	13	4	6	7	6
175	3	12	11	4	7	6	5	2	1	5	16	8	6	11	3
180	3	15	0	4	10	0	5	5	0	6	0	0	6	15	0
185	3	17	1	4	12	6	5	7	11	6	3	4	6	18	9
190	3	19	2	4	15	0	5	10	10	6	6	8	7	2	6
195	4	1	3	4	17	6	5	13	9	6	10	0	7	6	3
200	4	3	4	5	0	0	5	16	8	6	13	4	7	10	0

(198)

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d	£	s.	d.
205	4	5	5	5	2	6	5	19	7	6	16	8	7	13	9
210	4	7	6	5	5	0	6	2	6	7	0	0	7	17	6
215	4	9	7	5	7	6	6	5	5	7	3	4	8	1	3
220	4	11	8	5	10	0	6	8	4	7	6	8	8	5	0
225	4	13	9	5	12	6	6	11	3	7	10	0	8	8	9
230	4	15	10	5	15	0	6	14	2	7	13	4	8	12	6
235	4	17	11	5	17	6	6	17	1	7	16	8	8	16	3
240	5	0	0	6	0	0	7	0	0	8	0	0	9	0	0
245	5	2	1	6	2	6	7	2	11	8	3	4	9	3	9
250	5	4	2	6	5	0	7	5	10	8	6	8	9	7	6
255	5	6	3	6	7	6	7	8	9	8	10	0	9	11	3
260	5	8	4	6	10	0	7	11	8	8	13	4	9	15	0
265	5	10	5	6	12	6	7	14	7	8	16	8	9	18	9
270	5	12	6	6	15	0	7	17	6	9	0	0	10	2	6
275	5	14	7	6	17	6	8	0	5	9	3	4	10	6	3
280	5	16	8	7	0	0	8	3	4	9	6	8	10	10	0
285	5	18	9	7	2	6	8	6	3	9	10	0	10	13	9
290	6	0	10	7	5	0	8	9	2	9	13	4	10	17	6
295	6	2	11	7	7	6	8	12	1	9	16	8	11	1	3
300	6	5	0	7	10	0	8	15	0	10	0	0	11	5	0
305	6	7	1	7	12	6	8	17	11	10	3	4	11	8	9
310	6	9	2	7	15	0	9	0	10	10	6	8	11	12	6
315	6	11	3	7	17	6	9	3	9	10	10	0	11	16	3
320	6	13	4	8	0	0	9	6	8	10	13	4	12	0	0
325	6	15	5	8	2	6	9	9	7	10	16	8	12	3	9
330	6	17	6	8	5	0	9	12	6	11	0	0	12	7	6
335	6	19	7	8	7	6	9	15	5	11	3	4	12	11	3
340	7	1	8	8	10	0	9	18	4	11	6	8	12	15	0
345	7	3	9	8	12	6	10	1	3	11	10	0	12	18	9
350	7	5	10	8	15	0	10	4	2	11	13	4	13	2	6
355	7	7	11	8	17	6	10	7	1	11	16	8	13	6	3
360	7	10	0	9	0	0	10	10	0	12	0	0	13	10	0
365	7	12	1	9	2	6	10	12	11	12	3	4	13	13	9
370	7	14	2	9	5	0	10	15	10	12	6	8	13	17	6
375	7	16	3	9	7	6	10	18	9	12	10	0	14	1	3
380	7	18	4	9	10	0	11	1	8	12	13	4	14	5	0
385	8	0	5	9	12	6	11	4	7	12	16	8	14	8	9
390	8	2	6	9	15	0	11	7	6	13	0	0	14	12	6
395	8	4	7	9	17	6	11	10	5	13	3	4	14	16	3
400	8	6	8	10	0	0	11	13	4	13	6	8	15	0	0
405	8	8	9	10	2	6	11	16	3	13	10	0	15	3	9
410	8	10	10	10	5	0	11	19	2	13	13	4	15	7	6
415	8	12	11	10	7	6	12	2	1	13	16	8	15	11	3
420	8	15	0	10	10	0	12	5	0	14	0	0	15	15	0
425	8	17	1	10	12	6	12	7	11	14	3	4	15	18	9
430	8	19	2	10	15	0	12	10	10	14	6	8	16	2	6
435	9	1	3	10	17	6	12	13	9	14	10	0	16	6	3
440	9	3	4	11	0	0	12	16	8	14	13	4	16	10	0
445	9	5	5	11	2	6	12	19	7	14	16	8	16	13	9
450	9	7	6	11	5	0	13	2	6	15	0	0	16	17	6

£455-700

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
455	9	9	7	11	7	6	13	5	5	15	3	4	17	1	3
460	9	11	8	11	10	0	13	8	4	15	6	8	17	5	0
465	9	13	9	11	12	6	13	11	3	15	10	0	17	8	9
470	9	15	10	11	15	0	13	14	2	15	13	4	17	12	6
475	9	17	11	11	17	6	13	17	1	15	16	8	17	16	3
480	10	0	0	12	0	0	14	0	0	16	0	0	18	0	0
485	10	2	1	12	2	6	14	2	11	16	3	4	18	3	9
490	10	4	2	12	5	0	14	5	10	16	6	8	18	7	6
495	10	6	3	12	7	6	14	8	9	16	10	0	18	11	3
500	10	8	4	12	10	0	14	11	8	16	13	4	18	15	0
505	10	10	5	12	12	6	14	14	7	16	16	8	18	18	9
510	10	12	6	12	15	0	14	17	6	17	0	0	19	2	6
515	10	14	7	12	17	6	15	0	5	17	3	4	19	6	3
520	10	16	8	13	0	0	15	3	4	17	6	8	19	10	0
525	10	18	9	13	2	6	15	6	3	17	10	0	19	13	9
530	11	0	10	13	5	0	15	9	2	17	13	4	19	17	6
535	11	2	11	13	7	6	15	12	1	17	16	8	20	1	3
540	11	5	0	13	10	0	15	15	0	18	0	0	20	5	0
545	11	7	1	13	12	6	15	17	11	18	3	4	20	8	9
550	11	9	2	13	15	0	16	0	10	18	6	8	20	12	6
555	11	11	3	13	17	6	16	3	9	18	10	0	20	16	3
560	11	13	4	14	0	0	16	6	8	18	13	4	21	0	0
565	11	15	5	14	2	6	16	9	7	18	16	8	21	3	9
570	11	17	6	14	5	0	16	12	6	19	0	0	21	7	6
575	11	19	7	14	7	6	16	15	5	19	3	4	21	11	3
580	12	1	8	14	10	0	16	18	4	19	6	8	21	15	0
585	12	3	9	14	12	6	17	1	3	19	10	0	21	18	9
590	12	5	10	14	15	0	17	4	2	19	13	4	22	2	6
595	12	7	11	14	17	6	17	7	1	19	16	8	22	6	3
600	12	10	0	15	0	0	17	10	0	20	0	0	22	10	0
605	12	12	1	15	2	6	17	12	11	20	3	4	22	13	9
610	12	14	2	15	5	0	17	15	10	20	6	8	22	17	6
615	12	16	3	15	7	6	17	18	9	20	10	0	23	1	3
620	12	18	4	15	10	0	18	1	8	20	13	4	23	5	0
625	13	0	5	15	12	6	18	4	7	20	16	8	23	8	9
630	13	2	6	15	15	0	18	7	6	21	0	0	23	12	6
635	13	4	7	15	17	6	18	10	5	21	3	4	23	16	3
640	13	6	8	16	0	0	18	13	4	21	6	8	24	0	0
645	13	8	9	16	2	6	18	16	3	21	10	0	24	3	9
650	13	10	10	16	5	0	18	19	2	21	13	4	24	7	6
655	13	12	11	16	7	6	19	2	1	21	16	8	24	11	3
660	13	15	0	16	10	0	19	5	0	22	0	0	24	15	0
665	13	17	1	16	12	6	19	7	11	22	3	4	24	18	9
670	13	19	2	16	15	0	19	10	10	22	6	8	25	2	6
675	14	1	3	16	17	6	19	13	9	22	10	0	25	6	3
680	14	3	4	17	0	0	19	16	8	22	13	4	25	10	0
685	14	5	5	17	2	6	19	19	7	22	16	8	25	13	9
690	14	7	6	17	5	0	20	2	6	23	0	0	25	17	6
695	14	9	7	17	7	6	20	5	5	23	3	4	26	1	3
700	14	11	8	17	10	0	20	8	4	23	6	8	26	5	0

　　　(200)

£705–1,000

Income	TAX THEREON AT PER £														
	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
705	14	13	9	17	12	6	20	11	3	23	10	0	26	8	9
710	14	15	10	17	15	0	20	14	2	23	13	4	26	12	6
715	14	17	11	17	17	6	20	17	1	23	16	8	26	16	3
720	15	0	0	18	0	0	21	0	0	24	0	0	27	0	0
725	15	2	1	18	2	6	21	2	11	24	3	4	27	3	9
730	15	4	2	18	5	0	21	5	10	24	6	8	27	7	6
735	15	6	3	18	7	6	21	8	9	24	10	0	27	11	3
740	15	8	4	18	10	0	21	11	8	24	13	4	27	15	0
745	15	10	5	18	12	6	21	14	7	24	16	8	27	18	9
750	15	12	6	18	15	0	21	17	6	25	0	0	28	2	6
755	15	14	7	18	17	6	22	0	5	25	3	4	28	6	3
760	15	16	8	19	0	0	22	3	4	25	6	8	28	10	0
765	15	18	9	19	2	6	22	6	3	25	10	0	28	13	9
770	16	0	10	19	5	0	22	9	2	25	13	4	28	17	6
775	16	2	11	19	7	6	22	12	1	25	16	8	29	1	3
780	16	5	0	19	10	0	22	15	0	26	0	0	29	5	0
785	16	7	1	19	12	6	22	17	11	26	3	4	29	8	9
790	16	9	2	19	15	0	23	0	10	26	6	8	29	12	6
795	16	11	3	19	17	6	23	3	9	26	10	0	29	16	3
800	16	13	4	20	0	0	23	6	8	26	13	4	30	0	0
805	16	15	5	20	2	6	23	9	7	26	16	8	30	3	9
810	16	17	6	20	5	0	23	12	6	27	0	0	30	7	6
815	16	19	7	20	7	6	23	15	5	27	3	4	30	11	3
820	17	1	8	20	10	0	23	18	4	27	6	8	30	15	0
825	17	3	9	20	12	6	24	1	3	27	10	0	30	18	9
830	17	5	10	20	15	0	24	4	2	27	13	4	31	2	6
835	17	7	11	20	17	6	24	7	1	27	16	8	31	6	3
840	17	10	0	21	0	0	24	10	0	28	0	0	31	10	0
845	17	12	1	21	2	6	24	12	11	28	3	4	31	13	9
850	17	14	2	21	5	0	24	15	10	28	6	8	31	17	6
855	17	16	3	21	7	6	24	18	9	28	10	0	32	1	3
860	17	18	4	21	10	0	25	1	8	28	13	4	32	5	0
865	18	0	5	21	12	6	25	4	7	28	16	8	32	8	9
870	18	2	6	21	15	0	25	7	6	29	0	0	32	12	6
875	18	4	7	21	17	6	25	10	5	29	3	4	32	16	3
880	18	6	8	22	0	0	25	13	4	29	6	8	33	0	0
885	18	8	9	22	2	6	25	16	3	29	10	0	33	3	9
890	18	10	10	22	5	0	25	19	2	29	13	4	33	7	6
895	18	12	11	22	7	6	26	2	1	29	16	8	33	11	3
900	18	15	0	22	10	0	26	5	0	30	0	0	33	15	0
910	18	19	2	22	15	0	26	10	10	30	6	8	34	2	6
920	19	3	4	23	0	0	26	16	8	30	13	4	34	10	0
930	19	7	6	23	5	0	27	2	6	31	0	0	34	17	6
940	19	11	8	23	10	0	27	8	4	31	6	8	35	5	0
950	19	15	10	23	15	0	27	14	2	31	13	4	35	12	6
960	20	0	0	24	0	0	28	0	0	32	0	0	36	0	0
970	20	4	2	24	5	0	28	5	10	32	6	8	36	7	6
980	20	8	4	24	10	0	28	11	8	32	13	4	36	15	0
990	20	12	6	24	15	0	28	17	6	33	0	0	37	2	6
1,000	20	16	8	25	0	0	29	3	4	33	6	8	37	10	0

£1,010–1,500

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1,010	21	0	10	25	5	0	29	9	2	33	13	4	37	17	6
1,020	21	5	0	25	10	0	29	15	0	34	0	0	38	5	0
1,030	21	9	2	25	15	0	30	0	10	34	6	8	38	12	6
1,040	21	13	4	26	0	0	30	6	8	34	13	4	39	0	0
1,050	21	17	6	26	5	0	30	12	6	35	0	0	39	7	6
1,060	22	1	8	26	10	0	30	18	4	35	6	8	39	15	0
1,070	22	5	10	26	15	0	31	4	2	35	13	4	40	2	6
1,080	22	10	0	27	0	0	31	10	0	36	0	0	40	10	0
1,090	22	14	2	27	5	0	31	15	10	36	6	8	40	17	6
1,100	22	18	4	27	10	0	32	1	8	36	13	4	41	5	0
1,110	23	2	6	27	15	0	32	7	6	37	0	0	41	12	6
1,120	23	6	8	28	0	0	32	13	4	37	6	8	42	0	0
1,130	23	10	10	28	5	0	32	19	2	37	13	4	42	7	6
1,140	23	15	0	28	10	0	33	5	0	38	0	0	42	15	0
1,150	23	19	2	28	15	0	33	10	10	38	6	8	43	2	6
1,160	24	3	4	29	0	0	33	16	8	38	13	4	43	10	0
1,170	24	7	6	29	5	0	34	2	6	39	0	0	43	17	6
1,180	24	11	8	29	10	0	34	8	4	39	6	8	44	5	0
1,190	24	15	10	29	15	0	34	14	2	39	13	4	44	12	6
1,200	25	0	0	30	0	0	35	0	0	40	0	0	45	0	0
1,210	25	4	2	30	5	0	35	5	10	40	6	8	45	7	6
1,220	25	8	4	30	10	0	35	11	8	40	13	4	45	15	0
1,230	25	12	6	30	15	0	35	17	6	41	0	0	46	2	6
1,240	25	16	8	31	0	0	36	3	4	41	6	8	46	10	0
1,250	26	0	10	31	5	0	36	9	2	41	13	4	46	17	6
1,260	26	5	0	31	10	0	36	15	0	42	0	0	47	5	0
1,270	26	9	2	31	15	0	37	0	10	42	6	8	47	12	6
1,280	26	13	4	32	0	0	37	6	8	42	13	4	48	0	0
1,290	26	17	6	32	5	0	37	12	6	43	0	0	48	7	6
1,300	27	1	8	32	10	0	37	18	4	43	6	8	48	15	0
1,310	27	5	10	32	15	0	38	4	2	43	13	4	49	2	6
1,320	27	10	0	33	0	0	38	10	0	44	0	0	49	10	0
1,330	27	14	2	33	5	0	38	15	10	44	6	8	49	17	6
1,340	27	18	4	33	10	0	39	1	8	44	13	4	50	5	0
1,350	28	2	6	33	15	0	39	7	6	45	0	0	50	12	6
1,360	28	6	8	34	0	0	39	13	4	45	6	8	51	0	0
1,370	28	10	10	34	5	0	39	19	2	45	13	4	51	7	6
1,380	28	15	0	34	10	0	40	5	0	46	0	0	51	15	0
1,390	28	19	2	34	15	0	40	10	10	46	6	8	52	2	6
1,400	29	3	4	35	0	0	40	16	8	46	13	4	52	10	0
1,410	29	7	6	35	5	0	41	2	6	47	0	0	52	17	6
1,420	29	11	8	35	10	0	41	8	4	47	6	8	53	5	0
1,430	29	15	10	35	15	0	41	14	2	47	13	4	53	12	6
1,440	30	0	0	36	0	0	42	0	0	48	0	0	54	0	0
1,450	30	4	2	36	5	0	42	5	10	48	6	8	54	7	6
1,460	30	8	4	36	10	0	42	11	8	48	13	4	54	15	0
1,470	30	12	6	36	15	0	42	17	6	49	0	0	55	2	6
1,480	30	16	8	37	0	0	43	3	4	49	6	8	55	10	0
1,490	31	0	10	37	5	0	43	9	2	49	13	4	55	17	6
1,500	31	5	0	37	10	0	43	15	0	50	0	0	56	5	0

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1,510	31	9	2	37	15	0	44	0	10	50	6	8	56	12	6
1,520	31	13	4	38	0	0	44	6	8	50	13	4	57	0	0
1,530	31	17	6	38	5	0	44	12	6	51	0	0	57	7	6
1,540	32	1	8	38	10	0	44	18	4	51	6	8	57	15	0
1,550	32	5	10	38	15	0	45	4	2	51	13	4	58	2	6
1,560	32	10	0	39	0	0	45	10	0	52	0	0	58	10	0
1,570	32	14	2	39	5	0	45	15	10	52	6	8	58	17	6
1,580	32	18	4	39	10	0	46	1	8	52	13	4	59	5	0
1,590	33	2	6	39	15	0	46	7	6	53	0	0	59	12	6
1,600	33	6	8	40	0	0	46	13	4	53	6	8	60	0	0
1,610	33	10	10	40	5	0	46	19	2	53	13	4	60	7	6
1,620	33	15	0	40	10	0	47	5	0	54	0	0	60	15	0
1,630	33	19	2	40	15	0	47	10	10	54	6	8	61	2	6
1,640	34	3	4	41	0	0	47	16	8	54	13	4	61	10	0
1,650	34	7	6	41	5	0	48	2	6	55	0	0	61	17	6
1,660	34	11	8	41	10	0	48	8	4	55	6	8	62	5	0
1,670	34	15	10	41	15	0	48	14	2	55	13	4	62	12	6
1,680	35	0	0	42	0	0	49	0	0	56	0	0	63	0	0
1,690	35	4	2	42	5	0	49	5	10	56	6	8	63	7	6
1,700	35	8	4	42	10	0	49	11	8	56	13	4	63	15	0
1,710	35	12	6	42	15	0	49	17	6	57	0	0	64	2	6
1,720	35	16	8	43	0	0	50	3	4	57	6	8	64	10	0
1,730	36	0	10	43	5	0	50	9	2	57	13	4	64	17	6
1,740	36	5	0	43	10	0	50	15	0	58	0	0	65	5	0
1,750	36	9	2	43	15	0	51	0	10	58	6	8	65	12	6
1,760	36	13	4	44	0	0	51	6	8	58	13	4	66	0	0
1,770	36	17	6	44	5	0	51	12	6	59	0	0	66	7	6
1,780	37	1	8	44	10	0	51	18	4	59	6	8	66	15	0
1,790	37	5	10	44	15	0	52	4	2	59	13	4	67	2	6
1,800	37	10	0	45	0	0	52	10	0	60	0	0	67	10	0
1,810	37	14	2	45	5	0	52	15	10	60	6	8	67	17	6
1,820	37	18	4	45	10	0	53	1	8	60	13	4	68	5	0
1,830	38	2	6	45	15	0	53	7	6	61	0	0	68	12	6
1,840	38	6	8	46	0	0	53	13	4	61	6	8	69	0	0
1,850	38	10	10	46	5	0	53	19	2	61	13	4	69	7	6
1,860	38	15	0	46	10	0	54	5	0	62	0	0	69	15	0
1,870	38	19	2	46	15	0	54	10	10	62	6	8	70	2	6
1,880	39	3	4	47	0	0	54	16	8	62	13	4	70	10	0
1,890	39	7	6	47	5	0	55	2	6	63	0	0	70	17	6
1,900	39	11	8	47	10	0	55	8	4	63	6	8	71	5	0
1,910	39	15	10	47	15	0	55	14	2	63	13	4	71	12	6
1,920	40	0	0	48	0	0	56	0	0	64	0	0	72	0	0
1,930	40	4	2	48	5	0	56	5	10	64	6	8	72	7	6
1,940	40	8	4	48	10	0	56	11	8	64	13	4	72	15	0
1,950	40	12	6	48	15	0	56	17	6	65	0	0	73	2	6
1,960	40	16	8	49	0	0	57	3	4	65	6	8	73	10	0
1,970	41	0	10	49	5	0	57	9	2	65	13	4	73	17	6
1,980	41	5	0	49	10	0	57	15	0	66	0	0	74	5	0
1,990	41	9	2	49	15	0	58	0	10	66	6	8	74	12	6
2,000	41	13	4	50	0	0	58	6	8	66	13	4	75	0	0

£2,050–5,000

Income	5d.			6d.			7d.			8d.			9d.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
2,050	42	14	2	51	5	0	59	15	10	68	6	8	76	17	6
2,100	43	15	0	52	10	0	61	5	0	70	0	0	78	15	0
2,150	44	15	10	53	15	0	62	14	2	71	13	4	80	12	6
2,200	45	16	8	55	0	0	64	3	4	73	6	8	82	10	0
2,250	46	17	6	56	5	0	65	12	6	75	0	0	84	7	6
2,300	47	18	4	57	10	0	67	1	8	76	13	4	86	5	0
2,350	48	19	2	58	15	0	68	10	10	78	6	8	88	2	6
2,400	50	0	0	60	0	0	70	0	0	80	0	0	90	0	0
2,450	51	0	10	61	5	0	71	9	2	81	13	4	91	17	6
2,500	52	1	8	62	10	0	72	18	4	83	6	8	93	15	0
2,550	53	2	6	63	15	0	74	7	6	85	0	0	95	12	6
2,600	54	3	4	65	0	0	75	16	8	86	13	4	97	10	0
2,650	55	4	2	66	5	0	77	5	10	88	6	8	99	7	6
2,700	56	5	0	67	10	0	78	15	0	90	0	0	101	5	0
2,750	57	5	10	68	15	0	80	4	2	91	13	4	103	2	6
2,800	58	6	8	70	0	0	81	13	4	93	6	8	105	0	0
2,850	59	7	6	71	5	0	83	2	6	95	0	0	106	17	6
2,900	60	8	4	72	10	0	84	11	8	96	13	4	108	15	0
2,950	61	9	2	73	15	0	86	0	10	98	6	8	110	12	6
3,000	62	10	0	75	0	0	87	10	0	100	0	0	112	10	0
3,050	63	10	10	76	5	0	88	19	2	101	13	4	114	7	6
3,100	64	11	8	77	10	0	90	8	4	103	6	8	116	5	0
3,150	65	12	6	78	15	0	91	17	6	105	0	0	118	2	6
3,200	66	13	4	80	0	0	93	6	8	106	13	4	120	0	0
3,250	67	14	2	81	5	0	94	15	10	108	6	8	121	17	6
3,300	68	15	0	82	10	0	96	5	0	110	0	0	123	15	0
3,350	69	15	10	83	15	0	97	14	2	111	13	4	125	12	0
3,400	70	16	8	85	0	0	99	3	4	113	6	8	127	10	0
3,450	71	17	6	86	5	0	100	12	6	115	0	0	129	7	6
3,500	72	18	4	87	10	0	102	1	8	116	13	4	131	5	0
3,550	73	19	2	88	15	0	103	10	10	118	6	8	133	2	6
3,600	75	0	0	90	0	0	105	0	0	120	0	0	135	0	0
3,650	76	0	10	91	5	0	106	9	2	121	13	4	136	17	6
3,700	77	1	8	92	10	0	107	18	4	123	6	8	138	15	0
3,750	78	2	6	93	15	0	109	7	6	125	0	0	140	12	6
3,800	79	3	4	95	0	0	110	16	8	126	13	4	142	10	0
3,850	80	4	2	96	5	0	112	5	10	128	6	8	144	7	6
3,900	81	5	0	97	10	0	113	15	0	130	0	0	146	5	0
3,950	82	5	10	98	15	0	115	4	2	131	13	4	148	2	6
4,000	83	6	8	100	0	0	116	13	4	133	6	8	150	0	0
4,100	85	8	4	102	10	0	119	11	8	136	13	4	153	15	0
4,200	87	10	0	105	0	0	122	10	0	140	0	0	157	10	0
4,300	89	11	8	107	10	0	125	8	4	143	6	8	161	5	0
4,400	91	13	4	110	0	0	128	6	8	146	13	4	165	0	0
4,500	93	15	0	112	10	0	131	5	0	150	0	0	168	15	0
4,600	95	16	8	115	0	0	134	3	4	153	6	8	172	10	0
4,700	97	18	4	117	10	0	137	1	8	156	13	4	176	5	0
4,800	100	0	0	120	0	0	140	0	0	160	0	0	180	0	0
4,900	102	1	8	120	10	0	142	18	4	163	6	8	183	15	0
5,000	104	3	4	125	0	0	145	16	8	166	13	4	187	10	0

　　　　(204)

THE

LOGARITHMS OF NATURAL NUMBERS

TOGETHER WITH

THOMAN'S LOGARITHMIC TABLES

OF

COMPOUND INTEREST AND ANNUITIES

AND AN

EXPLANATION OF THE TABLES

LOGARITHMS OF NATURAL NUMBERS

PAGES 229-266 contain the logarithms of the natural numbers from 1 to 10,000.

The logarithm of a number is the index of the power to which the base must be raised to be equal to the number. Thus $5 \times 5 = 5^2$, where 5 is raised to the second power, and 2 is the index of the power. Again, $5 \times 5 \times 5 = 5^3$, where 5 is raised to the third power, and 3 is the index of the power. The base adopted for common logarithms such as are here given is 10, so that the logarithm

of   100 is 2 because $10^2 = 10 \times 10$ $= 100$

of 1,000 ,, 3   ,, $10^3 = 10 \times 10 \times 10$ $= 1,000$

of 10,000 ,, 4   ,, $10^4 = 10 \times 10 \times 10 \times 10 = 10,000$

and so on. But we may raise a number to any power we please, without confining ourselves to whole numbers. Thus $10^{\cdot6666} = 4\cdot641$ as may be seen from page 244, where 666612 is given as the logarithm of $4\cdot641$. Now $10^{\cdot6666} = 10^{\frac{6666}{10000}} = 10^{\frac{2}{3}}$ very nearly, but $10^{\frac{2}{3}} = \sqrt[3]{10^2}$ that is the cube root of 100. The cube root of 100 is approximately $4\cdot641$, that is to say $4\cdot641 \times 4\cdot641 \times 4\cdot641 = 99\cdot96$, which is very nearly 100. By means of logarithms we may get our results as nearly exact as we please, and the larger number of figures we have in our logarithms the more exact will our results be.

We have said that $\cdot6666$ is the logarithm of $4\cdot641$, but there is nothing in the table to show where the decimal point ought to come. For anything that appears in the table to the contrary, 6666 is the log of 4641, or 46·41 or 464·1. The explanation of this is, that only one part of the logarithm, called the *mantissa*, is given in the table ; the other part of the logarithm, called the *index* or *characteristic*, is supplied by inspection, according to certain rules which will be described presently. The rationale of these rules is very easy to follow. The mantissa is the decimal part of the index of the power to which 10 must be raised to equal a given number, and if the index is 0, it means that the power to which 10 has to be raised is less than unity, but as 10^1 or 10 to the first power $= 10$, it is plain that $10^{\cdot6666}$ must be less than 10, whence it follows that the natural number corresponding to log $\cdot6666$ cannot be 46·4 or 464, because these numbers are more than 10.

If we want to find the logarithm of 46·41, the complete logarithm must clearly be between 1 and 2, because 1 is the logarithm of 10, 2 is the log of 100 and 46 is between 10 and 100. Clearly, therefore, the log of 46 must have 1 for its index, and, looking in the table for the decimal part of the log corresponding to 4641, we find it to be 6666. Therefore the complete log of 46·41 is 1·6666. This means that 10 must be raised to a power the index of which is 1·6666, that is to say $10^{1 \cdot 6666} = 10^{\frac{16666}{10000}} = 10^{\frac{5}{3}} = \sqrt[3]{10^5}$. Now 10^5 equals 100,000, and the cube root of this is 46·41, more nearly 46·416, more nearly still 46·4158929. The reason why the index part of the log can be so readily determined by inspection, and why therefore it is unnecessary to tabulate more than the mantissa or decimal part of the logarithm, is based upon the fact that multiplication of numbers can be performed by adding their logarithms together. Now, as we have just seen, the log of 10 is 1, the log of 100 is 2, the log of 1,000 is 3, and so on. Hence, if we want to multiply a number by 10, we add 1 to the log ; to multiply by 100 we add 2 to the logarithm, and to multiply by 1,000 we add 3 to the logarithm of the number. Hence,

$$4 \cdot 641 \times 10 = \log 0 \cdot 6666 + \log 1 = \log 1 \cdot 6666 = 46 \cdot 41$$
$$46 \cdot 41 \times 10 = \log 1 \cdot 6666 + \log 1 = \log 2 \cdot 6666 = 464 \cdot 1$$
$$464 \cdot 1 \times 10 = \log 2 \cdot 6666 + \log 1 = \log 3 \cdot 6666 = 4641$$
$$4641 \ \times 10 = \log 3 \cdot 6666 + \log 1 = \log 4 \cdot 6666 = 46410$$

This leads us to the rule for determining the index part of the logarithm. If the number whose logarithm is sought contain one or more integral figures the index or characteristic is always one less than the number of integral figures in the number, and is positive.

Negative Index

Frequently, however, we have to deal with numbers that are less than unity, in which case the index of the logarithm becomes negative, although the decimal part remains positive. Dealing with these negative figures as we previously dealt with the positive ones, we see that

$$10^1 = 10, \quad \text{therefore 1} \quad \text{is the log of 10}$$
$$10^0 = 1, \quad ,, \quad 0 \quad ,, \quad ,, \quad 1$$
$$10^{-1} = \cdot 1, \quad ,, \quad -1 \text{ or } \bar{1} \quad ,, \quad ,, \quad \cdot 1$$
$$10^{-2} = \cdot 01, \quad ,, \quad -2 \text{ or } \bar{2} \quad ,, \quad ,, \quad \cdot 01$$
$$10^{-3} = \cdot 001, \quad ,, \quad -3 \text{ or } \bar{3} \quad ,, \quad ,, \quad \cdot 001.$$

and so on. This leads us to the rule for finding the index of quantities less than unity, which is that the index is the same as the place

from the decimal point which the first significant figure of the number occupies. Thus the first significant figure of ·oo1 is 1, which is in the third place from the decimal point, and the index of the log is consequently $\bar{3}$, while the mantissa is o. This index, as stated above, is minus, the minus sign being written over the index thus $\bar{3}$, not in front of it thus -3, in order to signify that the index only is minus, the mantissa remaining positive.

In dealing with numbers less than unity the mantissa is kept positive, and the index only is made negative for the sake of convenience in working ; but if there were any advantage in doing so the mantissa as well as the index could, of course, be made negative. We know that the log of 4·641 is o·6666, while the log of 100 is 2, and we can divide 4·641 by 100 by subtracting log 2 from log o·6666. This gives us log $\bar{1}$·3334, the whole of which is minus, and is the log of ·04641. Log -1·3334 is exactly the same as log $\bar{2}$·6666, where the index only is minus, and the mantissa is plus. It is, however, found in practice much more convenient to keep the mantissa invariably positive, or plus, letting the index only be minus.

Referring again to the example we have already quoted, and applying these two rules, we get the following results :—

$$·ooo4641 = \log \bar{4}·666612.$$
$$·oo4641 \ = \log \bar{3}·666612.$$
$$·o4641 \ \ = \log \bar{2}·666612.$$
$$·4641 \ \ \ = \log \bar{1}·666612.$$
$$4·641 \ \ \ = \log o·666612.$$
$$46·41 \ \ \ = \log 1·666612.$$
$$464·1 \ \ \ = \log 2·666612.$$
$$4641 \ \ \ \ = \log 3·666612.$$

The special convenience of logarithms, and it is a very great one, is that by their aid numbers

  can be multiplied by the addition of their logs.

    „   divided   „   subtraction   „

    „   raised to any power by the multiplication of their logarithms and their roots extracted by the division of their logarithms.

To find the Logarithm of a Number

Before giving examples of the use of logarithms, however, we must explain how to find the logarithm of a given number, and the number corresponding to a given logarithm. Where the number consists of only four figures it is immediately found from the tables by looking in the first column for the first three figures, and on the same line in

the column headed with the fourth figure the logarithm of the number will be found.

Thus on p. 232 we see that the decimal part of the logarithm of 1501 is 176381.

Again on p. 242 we find that the decimal part of the logarithm of 4341 is 637590.

If, however, we want to find the logarithm of 43405, which is half way between 4340 and 4341, we must take the logarithm as half way between 637490 and 637590, which = log 637540.

In order to facilitate finding the logarithms of numbers containing five or more figures, a column of differences is given on each page of the tables. In the case just given the difference is seen to be 100, which means that there is a difference of ·000100 between the logs of one number and the next.

To obtain the logarithm of a number containing five figures we take the logarithm of the first four figures direct from the table, then multiply the difference by the fifth figure of the number, divide the result by 10 and add it to the logarithm of the first four numbers. Thus to repeat the example just given :

$$
\begin{aligned}
4340 &= \log\ 637490 \\
\text{the difference } 100 \times 5 \div 10 &= \log\quad\ \ 50 \\
\hline
43405 &= \log\ 637540
\end{aligned}
$$

If we wish to find the logarithm of a number containing six figures we take the first five figures in the way just described, and to obtain the difference for the sixth figure we multiply the difference by the sixth figure and divide the result by 100.

Thus to find the log of 434054.

$$
\begin{aligned}
43405 &= \log 637540 \\
\text{the difference for 6th figure } 100 \times 4 \div 100 &= \log\quad\ \ 4 \\
\hline
434054 &= \log 637544
\end{aligned}
$$

The differences in this case are exceptionally simple to calculate because in the example chosen the difference is exactly 100, but the simplicity of the calculation serves to show with special clearness the principle involved. This principle of course is, that to find the difference for the 5th figure of a number we must multiply the difference given in the table by a fraction of which 10 is the denominator and the 5th figure of the number is the numerator. To obtain the 6th figure the difference must be multiplied by a fraction of which the denominator is 100 and the numerator the 6th figure. To find

the difference corresponding to the 7th figure the denominator is 1000 and the numerator the 7th figure and so on, as far as we please.

In dealing with these differences it must always be borne in mind that the figures printed in the Table of Differences come at the extreme right-hand end of the logarithms in the main part of the table. That is to say, if the difference printed in the last column is 100 it is understood to be really ·000100. If the printed difference is 99 it is to be understood as ·000099, while obviously the difference corresponding to the 5th figure must be in all cases less than the printed difference. If this is remembered there will be no fear of any mistake in taking out the logarithms for numbers containing five or six figures.

To find the Number Corresponding to a Logarithm

To find a number corresponding to a given logarithm we must look in the table for the nearest logarithm to the one we are dealing with. The first three figures of the logarithms are printed in large type on the top of the page. On the left-hand pages the first three figures of the *first* logarithm on the page are given. On the right-hand pages the first three figures of the *last* logarithm on the page are given, so that we can readily see whether the logarithm with which we are concerned does or does not come on a given page.

Now, let us suppose that we wish to find the natural number corresponding to log 735868. From p. 246 we see that log 735838 (which is 30 less than the logarithm we are dealing with) = 5443. The difference printed in the last column on this line is 80, and signifies that 80 corresponds to a difference of 1 in the 4th figure of the natural numbers, therefore 30 corresponds to a difference of $\frac{30}{80} \times 10$ in the 5th figure of the natural numbers. This = 375, so that the total number corresponding to log 735868 = 5443375.

Thus to find the number corresponding to a logarithm that is not given exactly in the table we must take from the table the nearest logarithm below the given logarithm and obtain the 5th and following figures of the natural number by dividing the difference between these two logarithms by the difference printed in the tables. The numerator of this fraction consisting of the difference between the given logarithm and the nearest logarithm below it printed in the tables, being multiplied by 10 to obtain the 5th figure of the natural number and by 100 to obtain the 6th figure, and so on.

Multiplication by Logarithms

Having seen how to find the logarithm corresponding to a number and the number corresponding to a logarithm, we may now proceed to the practical use of logarithms.

Multiplication of numbers is accomplished by the addition of the logarithms of their numbers, thus :

$$2547 = \log 3\text{·}406029 \text{ (p. 237)}$$
$$7383 = \log 3\text{·}868233 \text{ (p. 254)}$$
$$2547 \times 7383 = \log 7\text{·}274262 = 18804500.$$

The Index of the log being 7, there must be 8 figures in the answer.

A reference to p. 232 shows that the nearest logarithm to the logarithm of the answer is 274158, giving a difference of 104, which divided by the Tabular Difference of 231 equals very approximately 45 for the 5th and 6th figures of the answer.

Other examples of Multiplication by means of logarithms are appended.

Multiply 25·75 by 4·217.

$$25\text{·}75 = \log 1\text{·}410777 \text{ (p. 237)}$$
$$4\text{·}217 = \log 0\text{·}625004 \text{ (p. 243)}$$
$$25\text{·}75 \times 4\text{·}217 = \log 2\text{·}035781 = 108\text{·}58775 \text{ (p. 231)}$$

Multiply 3847 by ·0632.

$$3847 = \log 3\text{·}585122 \text{ (p. 241)}$$
$$\text{·}0632 = \log 2\text{·}800717 \text{ (p. 250)}$$
$$3847 \times \text{·}0632 = \quad 2\text{·}385839 = 243\text{·}1302 \text{ (p. 234)}$$

The exact answer in this case is 243·1304, which is obtained by using seven-figure logarithms, as follows :—

$$3847 = \log 3\text{·}5851222$$
$$\text{·}0632 = \log 2\text{·}8007171$$
$$3847 \times \text{·}0632 = \quad 2\text{·}3858393 = 243\text{·}1304.$$

It must, therefore, be borne in mind that to obtain exact results it is necessary to use a large number of figures in the logarithm, but the six figures given in the tables are sufficient for most practical purposes.

Division by Logarithms

The division of numbers is accomplished by subtraction of their logarithms, the logarithm of the divisor being taken from the dividend, the remainder being the logarithm of the quotient. Thus to divide 4364 by 2536 we have

$$4364 = \log 3\cdot639885 \text{ (p. 242)}$$
$$2536 = \log \underline{3\cdot404149} \text{ (p. 237)}$$
$$4364 \div 2536 = \log 0\cdot235736 = 1\cdot7208 \text{ (p. 232)}$$

Divide 426·53 by 32·79.

$$426\cdot53 = \log 2\cdot629950 \text{ (p. 243)}$$
$$32\cdot79 = \log \underline{1\cdot515741} \text{ (p. 239)}$$
$$426\cdot53 \div 32\cdot79 = \log 1\cdot114209 = 13\cdot008 \text{ (p. 230)}$$

Divide 32·79 by 426·53.

$$32\cdot79 = \log 1\cdot515741 \text{ (p. 239)}$$
$$426\cdot53 = \log \underline{2\cdot629950} \text{ (p. 243)}$$
$$32\cdot79 \div 426\cdot53 = \log \overline{2}\cdot885791 = \cdot076876 \text{ (p. 257)}$$

Divide 8652 by ·0461.

$$8652 = \log 3\cdot937117 \text{ (p. 260)}$$
$$\cdot0461 = \log \underline{\overline{2}\cdot663701} \text{ (p. 244)}$$
$$8652 \div \cdot0461 = \log 5\cdot273416 = 187679 \text{ (p. 233)}$$

In the last example we are subtracting a negative characteristic, and of course the subtraction of a minus quantity is accomplished by the addition of the corresponding positive or plus quantity.

Divide ·0461 by 8652.

$$\cdot0461 = \log \overline{2}\cdot663701 \text{ (p. 244)}$$
$$8652 = \log \underline{3\cdot937117} \text{ (p. 260)}$$
$$\cdot0461 \div 8652 = \log \overline{6}\cdot726584 = \cdot000005328 \text{ (p. 247)}$$

In this example we are subtracting a positive characteristic from a negative one, and this involves the addition of the corresponding negative quantity. If, as we have just seen,

$$8652 \div \cdot0461 = 187679 \qquad = \log 5\cdot273416 \text{ and}$$
$$\cdot0461 \div 8652 = \cdot000005328 = \log \overline{6}\cdot726584$$
$$187679 \times \cdot000005328 = \log 0\cdot000000 = 1,$$

thus affording an instructive proof of the accuracy of the results by adding the two logarithms together and obtaining the answer.

Involution by Logarithms

To raise a number to any given power we multiply the logarithm of the number by the index of the power. Thus the cube of 100 is log 2·000 × 3 = log 6·000 = 1,000,000 = 100 × 100 × 100.

Similarly

$$733^2 = \log 2\cdot865104 \times 2 = \log 5\cdot730208 = 537289$$
$$\cdot00733^2 = \log \bar{3}\cdot865104 \times 2 = \log \bar{5}\cdot730208 = \cdot0000537$$
$$\cdot00733^3 = \log \bar{3}\cdot865104 \times 3 = \log \bar{7}\cdot595312 = \cdot0000003938$$

In the last two examples we had negative characteristics to deal with, and it will be noticed that after multiplying the decimal part of the logarithm by 2 there was a positive remainder of 1, which is subtracted from twice the negative characteristic. Similarly in the cube there was a remainder of 2, which was subtracted from three times the negative characteristic. This treatment of the matter is an obvious consequence of the mantissa being positive and the characteristic negative.

Evolution by Logarithms

To find the root of a given number we must divide the logarithm of the number by the exponent of the root. Thus to find

the square root of a number we divide the log by 2;
   ,,   cube   ,,   ,,   ,,   ,,   3;
   ,,   fourth ,,   ,,   ,,   ,,   4;

and so on.

For example :

$$\sqrt[2]{537289} = \log 5\cdot730208 \div 2 = \log 2\cdot865104 = 733$$
$$\sqrt[3]{17\cdot43} = \log 1\cdot241297 \div 3 = \log 0\cdot413766 = 2\cdot5928$$
$$\sqrt[4]{2560000} = \log 6\cdot408240 \div 4 = \log 1\cdot602060 = 40$$
$$\sqrt[3]{\cdot0081} = \log \bar{3}\cdot908485 \div 3 = \log \bar{1}\cdot302828 = \cdot20083$$
$$\sqrt[3]{\cdot00081} = \log \bar{4}\cdot908485 \div 3 = \log \bar{2}\cdot969495 = \cdot093217$$

In this last instance we had a negative characteristic to deal with, and the most convenient way of treating it was to add − 2 to the $\bar{4}$ of the index, so obtaining a number, $\bar{6}$, which is exactly divisible by 3. To compensate for thus dealing with the index we must prefix an index of + 2 to the mantissa, and divide this result also by 3. The process thus becomes :

$$\log \bar{4} + \bar{2}\ldots\ldots = \log \bar{6} \qquad \text{this} \div 3 = \log \bar{2}$$
$$\log \cdot908485 + 2 = \underline{\log 2\cdot908485} \text{ this} \div 3 = \log 0\cdot969495$$
$$\log \bar{4}\cdot908485 \div 3 = \log \overline{2\cdot969495}$$

This produces the same result as if we had stated our entire logarithm as negative, divided it by 3, and subsequently converted it into a logarithm with a negative index and a positive mantissa. Thus :

$$\log - 4\cdot000000$$
$$\log + 0\cdot908485$$
is the same as
$$\log - \overline{3\cdot091515}$$

when both index and mantissa are negative.

This divided by $3 = \log - 1\cdot030505$, the whole of which is still negative. But this equals $\log \bar{2}\cdot969495$, where the index is negative and the mantissa positive, and this is the result obtained by dividing $\bar{4}\cdot908485$ by 3.

Thus the rule for dividing a logarithm with a negative index if the index is not exactly divisible by the divisor, is to add such a negative number to it as will make it exactly divisible, and prefix to the fractional part of the logarithm a positive integer equal to the negative integer added to the negative index. Of course, by adding a minus quantity to one part of the logarithm and a corresponding plus quantity to another part of it, the value of the logarithm is unaltered.

COMPOUND INTEREST

The Amount of 1 in any Number of Periods

Pages 269–316 contain M. Thoman's logarithmic tables of the amount of £1 at the end of any number of years and the logarithm of the annuity which £1 will purchase. The great value of these tables, and the various uses to which they may be put, will be at once apparent when the use of logarithms is understood. On p. 9 we showed that the amount of £1 in any number of years—or, more generally, the amount of 1 in any number of periods—is the amount of 1 in 1 period raised to the nth power. This is expressed as $(1 + i)^n$, where i is the rate of interest and n the number of years. M. Thoman uses the symbol r as the equivalent of $1 + i$, which means the amount of 1 in 1 period, but the modern practice is to use i for the rate of interest and $1 + i$ for the amount of 1 in 1 period. Now, as a number may be raised to any power by multiplying the logarithm of the number by the index of the power, we can obviously obtain the amount of £1 in any number of years with very little trouble. Thus, if we want to know the amount of £1 in 25 years at 4 %, we have to find the value of $1·04^{25}$. The log of 1·04 is seen from p. 230 to be 0·017033. This multiplied by 25 equals log 0·425825, which, from p. 237, we find to be 2·6658, which agrees with the result given in the interest table on p. 70. On turning to Thoman's table on p. 291 the logarithm is seen to be 0·4258335, and taking the natural number corresponding to this logarithm we get 266584, which agrees with the 5 places of decimals in the interest table of p. 70. It thus appears that to obtain the amount of 1 at the end of any number of periods we must multiply the log of $1 + i$ at the end of 1 period by the number of periods. The natural number corresponding to the logarithm thus obtained gives the required result.

Further examples are appended.

What is the amount of £1 at the end of 73 years at $5\frac{7}{8}$ % per annum ?

Turning to M. Thoman's table on p. 306 we find in the column headed log r^n year 73, log 1·8099199, which is the logarithm of the answer. From the logarithmic table on p. 251 we find that this corresponds to 64·5535.

What is the amount of £1 at the end of 27 years at $3\frac{1}{5}$ % per annum?

This rate of interest is not tabulated, so we must take the log of $(1+i)^{27}$. Now, as $i = 3\frac{1}{5}$ % or ·032, the value of $1 + i = 1·032$, $= \log 0·01368$, which is the logarithm given on p. 230. Multiplying this by 27, we obtain as our answer log ·36936 $= 2·3408$.

It will be seen that by means of logarithms enormous calculations may be made with the greatest ease. Thus suppose we want to know the amount to which 1*d.* will accumulate at 5 % compound interest in 1900 years ; our answer in pence is $1·05^{1900} = \log 0·0211893 \times 1900 = \log 40·25967$. To obtain the answer in pounds we subtract the log of 240, namely 2·38021, thus leaving log 37·87946 $= £75,763,500,000,000,000,000,000,000,000,000,000,000$.

If we wish to extend the calculation and show what income would be yielded from such an amount as this at 5 % interest every second to every man, woman, and child on the face of the earth, we have simply to divide by 20 to find the annual income from this sum, then by $365\frac{1}{4}$ to find the daily income, by 24 to find the income hourly, by 60 to find the income per minute, by 60 again to find the income per second, and finally by (say) 1,483 millions to find the income in each second for every individual in the world. These divisions are readily accomplished by adding the logarithms of the numbers together and subtracting the total from the logarithm of the amount of 1*d.* at the end of 1900 years. Thus,

$$1·05^{1900} = \log 40·259670$$

240	$= \log 2·380211$
20	$= \log 1·301030$
365·25	$= \log 2·562590$
24	$= \log 1·380211$
60	$= \log 1·778151$
60	$= \log 1·778151$
1,483,000,000	$= \log 9·171141$

$$\log 20·351485$$

$$\log 19·908185$$

which gives us £80,944,000,000,000,000,000 per second as the income for every man, woman, and child in every second from the accumulations of 1*d.* at 5% compound interest for 1900 years.

We often require to know, not so much what £1 will amount to in any number of times, but what various other amounts will come to. This is arrived at by the help of logarithms with very great ease. We have only to add the logarithm of the amount to the logarithm of the amount of £1 in the given number of years to at once obtain the logarithm of the answer.

What will £4372 amount to in 46 years at 4 %?

$$1 \cdot 04^{46} = \log 0 \cdot 7835336 \text{ (p. 291)}$$
$$4372 = \log 3 \cdot 6406802 \text{ (p. 242)}$$
$$1 \cdot 04^{46} \times 4372 = \log \underline{4 \cdot 4242138} = \text{£}26,559.$$

Again, what will £987 amount to at the end of 22 years at $3\frac{7}{12}$ %?

$$3\frac{7}{12} = 3 \cdot 58\dot{3}, \text{ so that } 1 + i = 1 \cdot 0358\dot{3} = \log 0 \cdot 0152899 \text{ (p. 320)}$$
$$1 \cdot 0358\dot{3}^{22} = \log 0 \cdot 0152899 \times 22 = \log \quad \cdot 3363778$$
$$987 = \log 2 \cdot 9943172 \qquad = \log 2 \cdot 9943172 \text{ (p. 264)}$$
$$1 \cdot 0358\dot{3}^{22} \times 987 = \log \underline{3 \cdot 3306950} = \text{£}2141 \cdot 4.$$

Present Value of £1

On p. 10 we showed that $v = \dfrac{1}{1 + i}$, where v is the present value of £1, and $v^n = \left(\dfrac{1}{1 + i}\right)^n$, where n represents the term. Hence to obtain the present value of £1 due at the end of any number of years we subtract the log of $(1 + i)^n$ from the log of 1^n. Thus, suppose we require to know the present value of £1 due at the end of 20 years at 5%, we have $(1 + i)^n = 1 \cdot 05^{20} = \log 0 \cdot 021189 \times 20 = \log 0 \cdot 42378$ to be subtracted from $1^n = \log 0 \cdot 000000$. Now log $0 \cdot 000000 - \log 0 \cdot 42378 = \log \overline{1} \cdot 57622 = \cdot 3769$, this agreeing with the result given in the interest tables on p. 74. The log of $(1 + i)^n$ is obtained from the columns headed log r^n on p. 299, and by subtracting the logarithm there given from the log of 1 we obtain the logarithm of the present value of 1 due at the end of n years. Further examples are appended.

What is the present value of £1 due at the end of 22 years at $4\frac{7}{8}$%?

From p. 298 we see that $\log (1 + i)^n = \log r^n = 0 \cdot 4547834$.

$$v^n = \left(\frac{1}{1 + i}\right)^n = \log 0 \cdot 0000000 - \log 0 \cdot 4547834 = \log \overline{1} \cdot 5452166$$
$$= \text{£} \cdot 35093.$$

What is the present value of £1 due at the end of 47 years at $2\frac{3}{8}$ %?

This equals $\log 0 \cdot 0000000 - \log 0 \cdot 4791140$ (p. 278) $= \log \overline{1} \cdot 5208860 = \cdot 33181.$

What is the present value of £1 due at the end of 30 years at $3\frac{1}{16}$ %?

This rate of interest is equivalent to 3·0625, and is not tabulated, so we must find from the table on p. 230 the logarithm of 1·030625, multiply by 30, and subtract it from the logarithm of 1.

$$1 = \log 0\cdot000000$$
$$1\cdot030625^{30} = \log \cdot0131007 \times 30 = \log \quad \cdot393021$$

$$\frac{1}{1\cdot030625^{30}} = \log \overline{1}\cdot606979 = £\cdot40456$$

What is the present value of £1 due at the end of 25 years at $3\frac{5}{8}$ %?

This rate of interest also is not tabulated, but the logarithm corresponding to $1 + i$ when i is at the rate of $3\frac{5}{8}$ % is given in the column log r, p. 320. It is there seen to be 0·0163368. Multiplying this by 25 we have log 0·40842, which, subtracted from log 1, leaves log $\overline{1}$·59158, corresponding to ·39046.

Annuity which £1 will Purchase

On pp. 16 and 17 we explain the Sinking Fund Tables given on pp. 106–115. It is there shown that the Sinking Fund is obtained by dividing unity by the amount of £1 per annum. It is, however, further explained (p. 17) that in this table no provision is made for paying interest on the capital. If this has to be done, the amounts given in the Sinking Fund Table must be increased each year by the annual interest on £1. Thus, if the Sinking Fund required to replace £1 in ten years at 4 % is £·083291 per annum, we must add the annual interest on £1 = ·04 to this amount, in order to obtain the annuity which £1 will purchase for ten years at 4 %. The result of this addition is (·083291 + ·04 =) ·123291, the logarithm of which is $\overline{1}$·090931, which is the logarithm given in the column headed a^n on p. 291. M. Thoman uses the symbol a^n to represent this quantity, but in modern notation it is more usually expressed by the symbol $\frac{1}{a_{\overline{n}|}}$. It will, moreover, be noticed that in M. Thoman's tables the index of the logarithm is given as 9 instead of $\overline{1}$, as given above. The reason of this is that some people think it more convenient to avoid the negative characteristics of logarithms by adding 10 to the index, subtracting the negative index, when it occurs, from this 10, and so always dealing with a positive index. The 10 that has been added is subsequently deducted from the index, and thus the same result is arrived at. The more usual and, we think, the more convenient plan is not to employ this artifice, but to

deal with negative characteristics, whenever they occur, in the manner already explained. Another point to be noticed in M. Thoman's logarithmic tables is that he puts a comma between the index and mantissa, and a decimal point between the 5th and 6th decimal places. It is more in accordance with modern English custom to put the decimal point between the index and mantissa of the logarithm, while there is nothing to be gained by putting any mark at all between the 5th and 6th decimal places. Thus 0,17033·34 in Thoman=0·1703334 in modern notation; and in regard to negative characteristics 9,09093·12 in Thoman=$\overline{1}$·0909312 in modern notation, and so on throughout wherever the index is seen by inspection, as it readily can be, to have had 10 added to it.

From what has already been said, it will be seen that in dealing with annuities there are four things to be considered. One is the sum to which an annuity will amount in any number of years; another is the present value of an annuity for any number of years; the third is the annuity for any number of years which 1 or any other given amount will purchase; and the fourth is the sinking fund which will redeem a debt in a given number of years. The third and fourth of these only differ by the amount of the interest on the debt for one year or one period, as has just been explained. It is the third of these for which the logarithm is given in M. Thoman's tables on pp. 269–316 in the column headed a^n. The fourth is tabulated in natural numbers under the head of Sinking Fund on pp. 106–115. Dealing with the third of these first, namely the annuity which £1 will purchase for any number of years, we have to notice that it is the reciprocal of the present value of £1 per annum tabulated in natural numbers on pp. 50–85. Obviously if the present value of an annuity of £1 per annum for 20 years at 4 % is 13·59033 (p. 70) an annuity for 20 years at 4 %, of which the present value is £1, is equivalent to $\dfrac{1}{13\cdot59033}$ of £1. This equals £·0735817, the logarithm of which is $\overline{2}$·866770, thus agreeing with the logarithm given on p. 291, where, however, the logarithm is stated as 8,86677·02. This difference in the method of stating the logarithm has already been explained.

As another example we may take the present value of an annuity for 26 years at 2¾ %. This is £18·40226 (p. 64), and taking the reciprocal of this amount we have ·05434115 = log $\overline{2}$·735129, which agrees with the logarithm given on p. 281.

Thus to find the annuity which 1 will purchase, we have only to take the natural number corresponding to the logarithm given on pp. 269–316 under the heading log a^n.

A few examples may be added. What annuity for 27 years will £1 buy at $3\frac{1}{4}$ %?

Ans. (p. 285) log $\overline{2}$·7497045 = ·056196.

For 86 years at $5\frac{1}{8}$ %?
Ans. (p. 300) log $\overline{2}$·7156373 = ·051956.

For 7 years at 3 %?
Ans. (p. 283) log $\overline{1}$·2054922 = ·160506 = ·130506 + ·03 (see p. 110).

If we require to know the annuity which any amount other than 1 will purchase, we have simply to multiply the annuity which 1 will purchase by the amount.

This is readily done by taking the logarithm of the amount, adding it to the logarithm of the annuity which 1 will purchase, and taking the natural number corresponding to the logarithm. Take, for example, the annuity for 27 years at $3\frac{1}{4}$ % that may be purchased for £3,927.

$$3927 = \log 3\cdot594061 \text{ (p. 241)}$$

The annuity which 1 will purchase = log 2·749704 (p. 285)

,, ,, 3927 ,, = log 2·343765 = £220·68.

What annuity for 68 years may be purchased for £5,737, reckoning interest at $4\frac{1}{2}$ %?

$$5737 = \log 3\cdot758685 \text{ (p. 249)}$$

The annuity which 1 will buy = log 2·675548 (p. 295)

,, ,, 5737 ,, = log 2·434233 = £271·79.

The annuity that may be bought for 1 at rates not given in the table may be calculated from the formula $\dfrac{1}{a_n} = \dfrac{i(1+i)^n}{(1+i)^n - 1}$

$= \log i + \log(1+i)^n - \log[(1+i)^n - 1]$.

What annuity for 30 years will £1 purchase at 5%?

$$i = \cdot05 = \log \overline{2}\cdot6989700 \text{ (p. 318)}$$

$(1+i)^n = 1\cdot05^{30} = \log 0\cdot0211893 \times 30 = \log 0\cdot6356790 = 4\cdot32194$

$$
\begin{array}{llll}
i(1+i)^n = & \cdot05 \times 1\cdot05^{30} & = \log 1\cdot3346490 \\
(1+i)^n - 1 = & 4\cdot32194 - 1 & = \log 0\cdot5213918 \\
\dfrac{i(1+i)^n}{(1+i)^n - 1} = & \dfrac{\cdot05 \times 1\cdot05^{30}}{3\cdot32194} & = \log \overline{2}\cdot8132572 = & \cdot065051
\end{array}
$$

This is the figure given on p. 299, save that the last figures of the logarithm are 70 instead of 72, a difference that is inappreciable.

What annuity for 10 years will £683 purchase at 4·1 %?

$$i = \cdot041 = \log \overline{2}\cdot6127839 \text{ (p. 319)}$$
$$(1 + i)^n = 1\cdot041^{10} = \log 0\cdot01745073 \times 10 = \log 0\cdot1745073 = 1\cdot49454$$
$$i(1 + i)^n = \cdot041 \times 1\cdot041^{10} = \log \overline{2}\cdot7872912$$
$$(1 + i)^n - 1 = 1\cdot49454 - 1 = \log \overline{1}\cdot6942014$$
$$\frac{i(1 + i)^n}{(1 + i)^n - 1} = \frac{\cdot041 \times 1\cdot041^{10}}{\cdot49454} = \log \overline{1}\cdot0930898$$
$$683 = \log 2\cdot8344207$$

£

Annuity £683 will buy for 10 years $= \log 1\cdot9275105 = 84\cdot6273$

Present Value of £1 per Annum

We have just seen that the present value of an annuity is the reciprocal of the amount of the annuity which 1 will purchase for the same period at the same rate of interest. In other words, the annuity which 1 will purchase and the present value of an annuity multiplied together produce unity—the period and the rate of interest, of course, being the same in both cases. The logarithms of the annuity which 1 will purchase are given in the column headed a^n, on pp. 269–316. By subtracting this tabulated logarithm from 0, which is the log of 1, we obtain the logarithm of the present value of an annuity of 1.

What is the present value of an annuity of £1 per annum for 43 years at $3\frac{7}{8}$ %?

$$1 = \log 0\cdot0000000$$

Annuity 1 will purchase for 43 years
   at $3\frac{7}{8}$ % . . . . . $= \log \overline{2}\cdot6824736$ (p. 290)
Present value of £1 per annum for
   43 years at $3\frac{7}{8}$ % . . . $= \log 1\cdot3175264 = £20\cdot7743$

What is the present value of £1 per annum for 30 years at 5 %?

$$1 = \log 0\cdot0000000$$

The annuity which 1 will purchase
   for 30 years at 5 % . . . $= \log \overline{2}\cdot8132570$ (p. 299)
Present value of £1 per annum for
   30 years at 5 % . . . $= \log 1\cdot1867430 = £15\cdot37245$

This result may be seen in the table on p. 74. Although the present values of annuities are given in natural numbers on pp. 50–85, it is often convenient to have the logarithms of the values rather than the natural numbers. Thus, suppose we want to know

the present value of an annuity of £47·25 per annum for 30 years at 5 %. To obtain the result we must multiply the value of £1 per annum by 47·25, and this, as has been already explained, can be most readily done by the addition of the logarithms of the two numbers.

Present value of £1 per annum
    for 30 years at 5 %   .   .   = log 1·186743 (p. 299)
    47·25 = log 1·674402 (p. 245)
    15·37245 × 47·25 = log 2·861145 = £726·35,

which is the present value of an annuity of £47·25 per annum for 30 years at 5%.

What is the present value of an annuity of £8642 for 68 years at $2\frac{7}{8}$ %?

            8642   = log 3·9366143 (p. 260)
Value of annuity of £1 (log 0
  − log 2·5269372)   .   .   = log 1 4730628 (p. 282)
Value of annuity of £8642 for
  68 years at $2\frac{7}{8}$ %   .   .   = log 5·4096771 = £256849.

The value of an annuity for some other rate of interest than is given in the tables may sometimes be needed, and we must therefore explain how the value may be arrived at.

We have already shown (p. 221) that the present value of an annuity is the reciprocal of the annuity that 1 will purchase, and that the annuity which 1 will purchase may be obtained from the formula $\frac{i(1+i)^n}{(1+i)^n-1}$. Hence the formula for finding the present value of an annuity is $\frac{(1+i)^n-1}{i(1+i)^n} = \log[(1+i)^n-1] - \log i - \log(1+i)^n$.

We may repeat the example already dealt with. What is the present value of £1 per annum for 30 years at 5 %?

$(1+i)^n = 1·05^{30} = \log 0·0211893 \times 30 = \log 0·6356790 = 4·32194$
$(1+i)^n - 1 = 4·32194 - 1 = 3·32194$ = log 0·5213918
    $i = ·05$ = log 2·6989700
    $(1+i)^n = 1·05^{30}$ = log 0·6356790
    $i(1+i)^n = ·05 \times 1·05^{30} = \log 1·3346490 = \log 1·3346490$
$\frac{(1+i)^n-1}{i(1+i)^n} = \frac{4·32194-1}{·05 \times 1·05^{30}}$ = log 1·1867428 = 15·372

If the logarithm here found is added to the logarithm found in the converse problem on p. 221, we have

$$\begin{array}{l} \log 1{\cdot}1867428 \\ \log \overline{2}{\cdot}8132572 \\ \log 0{\cdot}0000000 = 1 \end{array}$$

thus showing that the answers are reciprocals of each other.

What is the present value of £1 per annum for 75 years at 3·7 %?

$$1{\cdot}037^{75} \quad = \log 0{\cdot}0157788 \times 75 = \log 1{\cdot}1834100 = 15{\cdot}255$$
$$1{\cdot}037^{75} - 1 = \qquad\qquad 14{\cdot}255 = \log 1{\cdot}1539672$$
$${\cdot}037 \quad = \log \overline{2}{\cdot}5682017$$
$$1{\cdot}037^{75} \quad = \log 1{\cdot}1834100 \qquad \log 1{\cdot}7516117$$
$$\frac{1{\cdot}037^{75} - 1}{{\cdot}037 \times 1{\cdot}037^{75}} = \log 1{\cdot}4023555 = £25{\cdot}2555.$$

The Amount of £1 per Annum

Another calculation that we sometimes require to make is the sum to which an annuity will amount in a given number of years at a specified rate of interest.

If we know the present value of the annuity, and if we know also the sum to which £1 will amount in the given period, we can, by multiplying the present value by the amount of £1, obtain the sum to which the annuity will amount in the period. Thus, suppose we wish to ascertain the amount of £1 per annum for 20 years at 5 %. Turning to p. 74, we see that the present value of £1 per annum is 12·46221, and on the same page we see that the amount of £1 in 20 years is 2·6533. Multiplying these two amounts together we have 33·066, which agrees with the amount of £1 per annum given on the same page.

The reason of this connection is plain, for since the possession of an annuity of £1 for 20 years at 5% is mathematically equivalent to having £12·46221 in hand now, and as the sum to which £12·46221 will amount in 20 years is the amount of £1 in 20 years multiplied by 12·46221 (= 2·6533 × 12·46221 = 33·066), this must also be the sum to which an annuity of £1 will amount in 20 years at 5 %.

This result may very easily be obtained by logarithms from the tables on pp. 269–316. In the column headed a^n we have, as already explained, the reciprocal of the present value of an annuity, and in the column headed r^n we have the amount of £1, and we

make use of these two tables in the following way to obtain, as in the example just given, the amount of £1 per annum in 20 years at 5 %.

Turning to p. 299, we have

Value of annuity = (log 0 − log 2·9044049 =) log 1·0955951
Amount of £1   = log 0·4237860
Amount of annuity in 20 years at 5% = log 1·5193811

= £33·066, thus agreeing with the result previously obtained.

Some additional examples are appended.

What is the amount of £1 per annum at the end of 63 years at 3¼ %?

Value of annuity = log 1·4259707 (p. 285)
Amount of £1 = log 0·8750738 (p. 285)
Amount of annuity = log 2·3010445 = 200·007.

What is the amount of £735 per annum at the end of 34 years at 2⅞ %?

Value of annuity = log 1·3327200 (p. 282)
Amount of £1 = log 0·4185348 (p. 282)
735 = log 2·8662873 (p. 254)
Amount of £735 p.a. in 34 years = log 4·6175421 = £41,451·68.

It will be noticed that the logarithm of the annual payment is added to the other two logarithms, thus conveniently effecting the necessary multiplication.

Sinking Fund

A reference to the remarks on pp. 16, 17, and 219 will show the connection between the sinking fund and the annuity which £1 will purchase ; it will be seen that it is only necessary to deduct the rate of interest from the annuity which £1 will purchase to obtain the sinking fund. Thus the sinking fund which will redeem a debt of £1 in 25 years at 4 % is obtained by taking from p. 291 the annuity which 1 will purchase = log 2·8062612 = ·064012, and subtracting from this amount the rate of interest ·04 ; whence we have ·024012, which is the sinking fund given on p. 112.

Further examples as obtained by logarithms are appended.

What annual payment will redeem a debt of £1 in 65 years at 4⅛ %?

The annuity 1 will purchase (p. 292) = $\overline{2}$·6479998 = ·044463
Subtract the interest for 1 year = ·04125

Sinking fund = ·003213

What is the annual sinking fund that will amount to £337 in 43 years at $2\frac{5}{8}$ %?

Annuity 1 will buy = log $\overline{2}$·5918772 (p. 280)
337 = log 2·5276299 (p. 238)
Annuity 337 will buy = log 1·1195071 = 13·16760
Deduct interest on 337 for 1 year = 337 × $\dfrac{21}{8 \times 100}$ = 8·84625

Sinking fund to redeem 337 in 43 years = 4·32135

Or the calculation may be made in a slightly different way :—

Annuity 1 will buy = log $\overline{2}$·5918772 = ·039073
Sinking fund to redeem 1
= ·039073 − ·02625 = log $\overline{2}$·1079896 = ·012823
337 = log 2·5276299
Sinking fund to redeem 337 = log 0·6356195 = £4·32135

Annuities for which the Rate of Interest on Capital is Different from the Rate for Sinking Fund

As explained on p. 18, we require for this calculation to know the annual sinking fund that will amount to £1 in a given period at the lower rate of interest, and to know also the annual interest upon £1. The present value of an annuity equal to the addition of these two is 1, and the present value of an annuity of 1 is the reciprocal of the present value just mentioned.

What annuity must be paid during 29 years to repay a debt of £1 by accumulation at $3\frac{1}{4}$ % and to pay interest on the loan at $4\frac{1}{2}$ %?

The annuity which will amount to £1 in 29 years at $3\frac{1}{4}$ % is obtained by multiplying the annuity which 1 will purchase for 29 years by the present value of 1 due at the end of 29 years.

Annuity £1 will purchase (p. 285) = log $\overline{2}$·7305144
Present value of £1 (p. 285) = log $\overline{1}$·5971883

Annuity to amount to £1 in 29 years = log $\overline{2}$·3277027 = ·021267
Annual interest on £1 = ·045

Annual payment required = log $\overline{2}$·8212973 = ·066267

If, on the other hand, we want to know the present value of an annuity of £1 for 29 years on the condition that interest on the loan is being paid at 4½ %, and the principal is being replaced by accumulation at 3¼ %, we must take the reciprocal of the above amount. This is log 0·0 − log $\overline{2}$·8212973 = 1·1787027 = £15·0905.

What is the value of an annuity of £1 for 50 years yielding interest on capital at 5 %, and replacing capital when invested at 3 %?

Annuity £1 will purchase (p. 283) = log $\overline{2}$·5895642
Present value of £1   (p. 283) = log $\overline{1}$·3581388
Annuity to amount to £1 in 50 years = log $\overline{3}$·9477030 = ·0088655
Annual interest on £1   = ·050
Annuity to pay £1 and interest = log 2·7698608   = ·0588655

Required value of annuity = log 0·0 − log 2·7698608 = log 1·2301392 = £16·98788, which agrees with the amount given on p. 120.

As in other cases, the values or amounts of annuities other than £1 may be obtained by the addition of the logarithms.

Logarithm of the Rate of Interest

The Tables on pp. 318–320 give the logarithm of the rate of interest under the heading t. This is in modern notation represented by the symbol i. On p. 318 this is given to 10 places of decimals for every rate given in M. Thoman's first Table (pp. 269–316). On p. 319 it is given for every $\frac{1}{10}$th % up to 10 %, and on p. 320 for every $\frac{1}{12}$th % also up to 10 %.

This Table is convenient for such calculations as the present value of £1 per annum, as may be seen from the first example on p. 222.

It has several times been pointed out that the more decimals are taken in the logarithm the more nearly exact will be the results. This is especially the case when the logarithm has to be multiplied.

Logarithm of the Amount of 1 in 1 Period

This logarithm is given to 7 places of decimals on pp. 269–316 in the column r^n, but on p. 318 the logarithm is given to 10 places of decimals. As has just been said, the use of 10 places gives more nearly exact results than 7 places, though for most purposes 7 places are sufficient.

As an example of a fairly large difference, as differences go, take the amount of £1 for 90 years at $2\frac{7}{8}$ % :—

$1 \cdot 02875^{90}$ (*see* p. 216) $= \log 0 \cdot 0123098482$ (p. 318) $\times$ 90
$$= \log 1 \cdot 1078863380 = 12 \cdot 8199544.$$
$1 \cdot 02875^{90} = \log 0 \cdot 0123098 \times 90 = \log 1 \cdot 1078820 = 12 \cdot 8198265.$

This only gives a difference of 25 shillings in the amount of £10,000 in 90 years, thus showing that 7 places are usually ample. Even this difference does not occur if we take the logarithm from p. 282, where it is seen to be log $1 \cdot 1078863 = 12 \cdot 8199533$, giving a difference of £1 in the amount of one million pounds in 90 years.

The 10-figure logarithms are useful, however, for the construction of a table of $(1 + i)^n$ (or r^n), as in pp. 269–316, where the multiplication is worked to 10 places, and the nearest 7 places are printed. This accounts for the smaller variation when $(1 + i)^{90}$ is taken from p. 282.

The tables on pp. 319 and 320 give log $(1 + i)$, or log r, as M. Thoman called it, for every $\frac{1}{10}$th and $\frac{1}{2}$th %, and it is more convenient to take these logarithms from this table than from the table of logarithms on pp. 230–266.

The Logarithms of Log r

Under the heading of 'log² r' we have the logarithm of 'log r.' Thus at $\frac{1}{2}$ % 'log r' = 0·00216606 ; and from p. 235 we see that this number = log 3·33567, which agrees with the value of 'log² r' on p. 318.

We sometimes find it convenient to multiply a logarithm by taking the logarithm of the logarithm and adding the logarithm of the multiplier. This gives us a logarithm of the second order, as it were (log²), and the number corresponding to this log² is the log we require.

Thus to get the logarithm of $(1 + i)^{87}$ when $i = \cdot 04$, we have

$$
\begin{aligned}
\log^2 r &= \quad \log \bar{2} \cdot 2312998 \text{ (p. 318)} \\
87 &= \quad \log 1 \cdot 9395193 \\
\log (1 + i)^{87} &= \quad \log^2 \overline{0 \cdot 1708191} = \log 1 \cdot 48190,
\end{aligned}
$$

thus agreeing with the figure given on p. 291 and with log $(1 + i) \times 87$ by ordinary multiplication.

TABLE

OF

THE LOGARITHMS

OF

THE NATURAL NUMBERS

From 1 to 10,000

(229)

Log. 000. No. 100.

No.	0	1	2	3	4	Diff.
100	000000	000434	000868	001301	001734	433
101	004321	004751	005181	005609	006038	429
102	008600	009026	009451	009876	010300	425
103	012837	013259	013680	014100	014521	421
104	017033	017451	017868	018284	018700	416
105	021189	021603	022016	022428	022841	412
106	025306	025715	026125	026533	026942	409
107	029384	029789	030195	030600	031004	405
108	033424	033826	034227	034628	035029	401
109	037426	037825	038223	038620	039017	397
110	041393	041787	042182	042576	042969	393
111	045323	045714	046105	046495	046885	390
112	049218	049606	049993	050380	050766	387
113	053078	053463	053846	054230	054613	383
114	056905	057286	057666	058046	058426	380
115	060698	061075	061452	061829	062206	377
116	064458	064832	065206	065580	065953	374
117	068186	068557	068928	069298	069668	370
118	071882	072250	072617	072985	073352	367
119	075547	075912	076276	076640	077004	364
120	079181	079543	079904	080266	080626	361
121	082785	083144	083503	083861	084219	358
122	086360	086716	087071	087426	087781	355
123	089905	090258	090611	090963	091315	352
124	093422	093772	094122	094471	094820	349
125	096910	097257	097604	097951	098298	347
126	100371	100715	101059	101403	101747	344
127	103804	104146	104487	104828	105169	341
128	107210	107549	107888	108227	108565	338
129	110590	110926	111263	111599	111934	336
130	113943	114277	114611	114944	115278	333
131	117271	117603	117934	118265	118595	330
132	120574	120903	121231	121560	121888	328
133	123852	124178	124504	124830	125156	326
134	127105	127429	127753	128076	128399	323
135	130334	130655	130977	131298	131619	321
136	133539	133858	134177	134496	134814	319
137	136721	137037	137354	137671	137987	316
138	139879	140194	140508	140822	141136	314
139	143015	143327	143639	143951	144263	312
140	146128	146438	146748	147058	147367	310
141	149219	149527	149835	150142	150449	307
142	152288	152594	152900	153205	153510	305
143	155336	155640	155943	156246	156549	303
144	158362	158664	158965	159266	159567	301
145	161368	161667	161967	162266	162564	299
146	164353	164650	164947	165244	165541	297
147	167317	167613	167908	168203	168497	295
148	170262	170555	170848	171141	171434	293
149	173186	173478	173769	174060	174351	291

Log. 175. No. 149.

No.	5	6	7	8	9	Diff.
100	002166	002598	003029	003461	003891	431
101	006466	006894	007321	007748	008174	427
102	010724	011147	011570	011993	012415	423
103	014940	015360	015779	016197	016616	419
104	019116	019532	019947	020361	020775	415
105	023252	023664	024075	024486	024896	411
106	027350	027757	028164	028571	028978	407
107	031408	031812	032216	032619	033021	403
108	035430	035830	036230	036629	037028	399
109	039414	039811	040207	040602	040998	396
110	043362	043755	044148	044540	044932	392
111	047275	047664	048053	048442	048830	389
112	051153	051538	051924	052309	052694	385
113	054996	055378	055760	056142	056524	382
114	058805	059185	059563	059942	060320	379
115	062582	062958	063333	063709	064083	375
116	066326	066699	067071	067443	067815	372
117	070038	070407	070776	071145	071514	369
118	073718	074085	074451	074816	075182	366
119	077368	077731	078094	078457	078819	363
120	080987	081347	081707	082067	082426	360
121	084576	084934	085291	085647	086004	357
122	088136	088490	088845	089198	089552	354
123	091667	092018	092370	092721	093071	351
124	095169	095518	095866	096215	096562	348
125	098644	098990	099335	099681	100026	345
126	102091	102434	102777	103119	103462	343
127	105510	105851	106191	106531	106871	340
128	108903	109241	109579	109916	110253	337
129	112270	112605	112940	113275	113609	335
130	115611	115943	116276	116608	116940	332
131	118926	119256	119586	119915	120245	329
132	122216	122544	122871	123198	123525	327
133	125481	125806	126131	126456	126781	325
134	128722	129045	129368	129690	130012	322
135	131939	132260	132580	132900	133219	320
136	135133	135451	135769	136086	136403	318
137	138303	138618	138934	139249	139564	315
138	141450	141763	142076	142389	142702	313
139	144574	144885	145196	145507	145818	311
140	147676	147985	148294	148603	148911	309
141	150756	151063	151370	151676	151982	306
142	153815	154120	154424	154728	155032	304
143	156852	157154	157457	157759	158061	302
144	159868	160168	160469	160769	161068	300
145	162863	163161	163460	163758	164055	298
146	165838	166134	166430	166726	167022	296
147	168792	169086	169380	169674	169968	294
148	171726	172019	172311	172603	172895	292
149	174641	174932	175222	175512	175802	290

Log. 176. No. 150.

No.	0	1	2	3	4	Diff.
150	176091	176381	176670	176959	177248	289
151	178977	179264	179552	179839	180126	287
152	181844	182129	182415	182700	182985	285
153	184691	184975	185259	185542	185825	283
154	187521	187803	188084	188366	188647	281
155	190332	190612	190892	191171	191451	279
156	193125	193403	193681	193959	194237	278
157	195900	196176	196453	196729	197005	276
158	198657	198932	199206	199481	199755	274
159	201397	201670	201943	202216	202488	273
160	204120	204391	204663	204934	205204	271
161	206826	207096	207365	207634	207904	269
162	209515	209783	210051	210319	210586	268
163	212188	212454	212720	212986	213252	266
164	214844	215109	215373	215638	215902	264
165	217484	217747	218010	218273	218536	263
166	220108	220370	220631	220892	221153	261
167	222716	222976	223236	223496	223755	260
168	225309	225568	225826	226084	226342	258
169	227887	228144	228400	228657	228913	257
170	230449	230704	230960	231215	231470	255
171	232996	233250	233504	233757	234011	254
172	235528	235781	236033	236285	236537	252
173	238046	238297	238548	238799	239049	251
174	240549	240799	241048	241297	241546	249
175	243038	243286	243534	243782	244030	248
176	245513	245759	246006	246252	246499	246
177	247973	248219	248464	248709	248954	245
178	250420	250664	250908	251151	251395	244
179	252853	253096	253338	253580	253822	242
180	255273	255514	255755	255996	256237	241
181	257679	257918	258158	258398	258637	240
182	260071	260310	260548	260787	261025	238
183	262451	262688	262925	263162	263399	237
184	264818	265054	265290	265525	265761	236
185	267172	267406	267641	267875	268110	234
186	269513	269746	269980	270213	270446	233
187	271842	272074	272306	272538	272770	232
188	274158	274389	274620	274850	275081	231
189	276462	276692	276921	277151	277380	229
190	278754	278982	279211	279439	279667	228
191	281033	281261	281488	281715	281942	227
192	283301	283527	283753	283979	284205	226
193	285557	285782	286007	286232	286456	225
194	287802	288026	288249	288473	288696	224
195	290035	290257	290480	290702	290925	222
196	292256	292478	292699	292920	293141	221
197	294466	294687	294907	295127	295347	220
198	296665	296884	297104	297323	297542	219
199	298853	299071	299289	299507	299725	218

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Log. 300. No. 199.

No.	5	6	7	8	9	Diff.
150	177536	177825	178113	178401	178689	288
151	180413	180699	180986	181272	181558	286
152	183270	183555	183839	184123	184407	284
153	186108	186391	186674	186956	187239	283
154	188928	189209	189490	189771	190051	281
155	191730	192010	192289	192567	192846	279
156	194514	194792	195069	195346	195623	277
157	197281	197556	197832	198107	198382	275
158	200029	200303	200577	200850	201124	274
159	202761	203033	203305	203577	203848	272
160	205475	205746	206016	206286	206556	270
161	208173	208441	208710	208979	209247	269
162	210853	211121	211388	211654	211921	267
163	213518	213783	214049	214314	214579	265
164	216166	216430	216694	216957	217221	264
165	218798	219060	219323	219585	219846	262
166	221414	221675	221936	222196	222456	260
167	224015	224274	224533	224792	225051	259
168	226600	226858	227115	227372	227630	257
169	229170	229426	229682	229938	230193	256
170	231724	231979	232234	232488	232742	254
171	234264	234517	234770	235023	235276	253
172	236789	237041	237292	237544	237795	251
173	239299	239550	239800	240050	240300	250
174	241795	242044	242293	242541	242790	249
175	244277	244525	244772	245019	245266	247
176	246745	246991	247237	247482	247728	246
177	249198	249443	249687	249932	250176	244
178	251638	251881	252125	252368	252610	243
179	254064	254306	254548	254790	255031	242
180	256477	256718	256958	257198	257439	240
181	258877	259116	259355	259594	259833	239
182	261263	261501	261739	261976	262214	238
183	263636	263873	264109	264346	264582	236
184	265996	266232	266467	266702	266937	235
185	268344	268578	268812	269046	269279	234
186	270679	270912	271144	271377	271609	233
187	273001	273233	273464	273696	273927	231
188	275311	275542	275772	276002	276232	230
189	277609	277838	278067	278296	278525	229
190	279895	280123	280351	280578	280806	228
191	282169	282396	282622	282849	283075	226
192	284431	284656	284882	285107	285332	225
193	286681	286905	287130	287354	287578	224
194	288920	289143	289366	289589	289812	223
195	291147	291369	291591	291813	292034	222
196	293363	293584	293804	294025	294246	221
197	295567	295787	296007	296226	296446	220
198	297761	297979	298198	298416	298635	218
199	299943	300161	300378	300595	300813	217

Log. 301. No. 200.

No.	0	1	2	3	4	Diff.
200	301030	301247	301464	301681	301898	217
201	303196	303412	303628	303844	304059	216
202	305351	305566	305781	305996	306211	215
203	307496	307710	307924	308137	308351	214
204	309630	309843	310056	310268	310481	213
205	311754	311966	312177	312389	312600	212
206	313867	314078	314289	314499	314710	211
207	315970	316180	316390	316599	316809	210
208	318063	318272	318481	318689	318898	209
209	320146	320354	320562	320769	320977	208
210	322219	322426	322633	322839	323046	207
211	324282	324488	324694	324899	325105	206
212	326336	326541	326745	326950	327155	205
213	328380	328583	328787	328991	329194	204
214	330414	330617	330819	331022	331225	203
215	332438	332640	332842	333044	333246	202
216	334454	334655	334856	335057	335257	201
217	336460	336660	336860	337060	337260	200
218	338456	338656	338855	339054	339253	199
219	340444	340642	340841	341039	341237	198
220	342423	342620	342817	343014	343212	197
221	344392	344589	344785	344981	345178	196
222	346353	346549	346744	346939	347135	195
223	348305	348500	348694	348889	349083	194
224	350248	350442	350636	350829	351023	194
225	352183	352375	352568	352761	352954	193
226	354108	354301	354493	354685	354876	192
227	356026	356217	356408	356599	356790	191
228	357935	358125	358316	358506	358696	190
229	359835	360025	360215	360404	360593	190
230	361728	361917	362105	362294	362482	189
231	363612	363800	363988	364176	364363	188
232	365488	365675	365862	366049	366236	187
233	367356	367542	367729	367915	368101	186
234	369216	369401	369587	369772	369958	185
235	371068	371253	371437	371622	371806	185
236	372912	373096	373280	373464	373647	184
237	374748	374932	375115	375298	375481	183
238	376577	376759	376942	377124	377306	182
239	378398	378580	378761	378943	379124	182
240	380211	380392	380573	380754	380934	181
241	382017	382197	382377	382557	382737	180
242	383815	383995	384174	384353	384533	179
243	385606	385785	385964	386142	386321	179
244	387390	387568	387746	387923	388101	178
245	389166	389343	389520	389698	389875	177
246	390935	391112	391288	391464	391641	176
247	392697	392873	393048	393224	393400	176
248	394452	394627	394802	394977	395152	175
249	396199	396374	396548	396722	396896	174

Log. 397. No. 249.

No.	5	6	7	8	9	Diff.
200	302114	302331	302547	302764	302980	216
201	304275	304491	304706	304921	305136	215
202	306425	306639	306854	307068	307282	214
203	308564	308778	308991	309204	309417	213
204	310693	310906	311118	311330	311542	212
205	312812	313023	313234	313445	313656	211
206	314920	315130	315340	315551	315760	210
207	317018	317227	317436	317646	317854	209
208	319106	319314	319522	319730	319938	208
209	321184	321391	321598	321805	322012	207
210	323252	323458	323665	323871	324077	206
211	325310	325516	325721	325926	326131	205
212	327359	327563	327767	327972	328176	204
213	329398	329601	329805	330008	330211	203
214	331427	331630	331832	332034	332236	202
215	333447	333649	333850	334051	334253	201
216	335458	335658	335859	336059	336260	200
217	337459	337659	337858	338058	338257	199
218	339451	339650	339849	340047	340246	199
219	341435	341632	341830	342028	342225	198
220	343409	343606	343802	343999	344196	197
221	345374	345570	345766	345962	346157	196
222	347330	347525	347720	347915	348110	195
223	349278	349472	349666	349860	350054	194
224	351216	351410	351603	351796	351989	193
225	353147	353339	353532	353724	353916	192
226	355068	355260	355452	355643	355834	192
227	356981	357172	357363	357554	357744	191
228	358886	359076	359266	359456	359646	190
229	360783	360972	361161	361350	361539	189
230	362671	362859	363048	363236	363424	188
231	364551	364739	364926	365113	365301	187
232	366423	366610	366796	366983	367169	187
233	368287	368473	368659	368845	369030	186
234	370143	370328	370513	370698	370883	185
235	371991	372175	372360	372544	372728	184
236	373831	374015	374198	374382	374565	183
237	375664	375846	376029	376212	376394	183
238	377488	377670	377852	378034	378216	182
239	379306	379487	379668	379849	380030	181
240	381115	381296	381476	381656	381837	180
241	382917	383097	383277	383456	383636	180
242	384712	384891	385070	385249	385428	179
243	386499	386677	386856	387034	387212	178
244	388279	388456	388634	388811	388989	177
245	390051	390228	390405	390582	390759	177
246	391817	391993	392169	392345	392521	176
247	393575	393751	393926	394101	394277	175
248	395326	395501	395676	395850	396025	175
249	397071	397245	397419	397592	397766	174

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Log. 397. No. 250.

No.	0	1	2	3	4	Diff.
250	397940	398114	398287	398461	398634	173
251	399674	399847	400020	400192	400365	173
252	401401	401573	401745	401917	402089	172
253	403121	403292	403464	403635	403807	171
254	404834	405005	405176	405346	405517	171
255	406540	406710	406881	407051	407221	170
256	408240	408410	408579	408749	408918	169
257	409933	410102	410271	410440	410609	169
258	411620	411788	411956	412124	412293	168
259	413300	413467	413635	413803	413970	167
260	414973	415140	415307	415474	415641	167
261	416641	416807	416973	417139	417306	166
262	418301	418467	418633	418798	418964	165
263	419956	420121	420286	420451	420616	165
264	421604	421768	421933	422097	422261	164
265	423246	423410	423574	423737	423901	163
266	424882	425045	425208	425371	425534	163
267	426511	426674	426836	426999	427161	162
268	428135	428297	428459	428621	428783	162
269	429752	429914	430075	430236	430398	161
270	431364	431525	431685	431846	432007	160
271	432969	433130	433290	433450	433610	160
272	434569	434729	434888	435048	435207	159
273	436163	436322	436481	436640	436799	159
274	437751	437909	438067	438226	438384	158
275	439333	439491	439648	439806	439964	157
276	440909	441066	441224	441381	441538	157
277	442480	442637	442793	442950	443106	156
278	444045	444201	444357	444513	444669	156
279	445604	445760	445915	446071	446226	155
280	447158	447313	447468	447623	447778	155
281	448706	448861	449015	449170	449324	154
282	450249	450403	450557	450711	450865	154
283	451786	451940	452093	452247	452400	153
284	453318	453471	453624	453777	453930	153
285	454845	454997	455150	455302	455454	152
286	456366	456518	456670	456821	456973	152
287	457882	458033	458184	458336	458487	151
288	459392	459543	459694	459845	459995	151
289	460898	461048	461198	461348	461499	150
290	462398	462548	462697	462847	462997	149
291	463893	464042	464191	464340	464490	149
292	465383	465532	465680	465829	465977	148
293	466868	467016	467164	467312	467460	148
294	468347	468495	468643	468790	468938	147
295	469822	469969	470116	470263	470410	147
296	471292	471438	471585	471732	471878	146
297	472756	472903	473049	473195	473341	146
298	474216	474362	474508	474653	474799	146
299	475671	475816	475962	476107	476252	145

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Log. 476. No. 299.

No.	5	6	7	8	9	Diff.
250	398808	398981	399154	399328	399501	173
251	400538	400711	400883	401056	401228	173
252	402261	402433	402605	402777	402949	172
253	403978	404149	404320	404492	404663	171
254	405688	405858	406029	406199	406370	171
255	407391	407561	407731	407901	408070	170
256	409087	409257	409426	409595	409764	169
257	410777	410946	411114	411283	411451	169
258	412461	412629	412796	412964	413132	168
259	414137	414305	414472	414639	414806	167
260	415808	415974	416141	416308	416474	167
261	417472	417638	417804	417970	418135	166
262	419129	419295	419460	419625	419791	165
263	420781	420945	421110	421275	421439	165
264	422426	422590	422754	422918	423082	164
265	424065	424228	424392	424555	424718	163
266	425697	425860	426023	426186	426349	163
267	427324	427486	427648	427811	427973	162
268	428944	429106	429268	429429	429591	162
269	430559	430720	430881	431042	431203	161
270	432167	432328	432488	432649	432809	160
271	433770	433930	434090	434249	434409	160
272	435367	435526	435685	435844	436004	159
273	436957	437116	437275	437433	437592	159
274	438542	438701	438859	439017	439175	158
275	440122	440279	440437	440594	440752	157
276	441695	441852	442009	442166	442323	157
277	443263	443419	443576	443732	443889	156
278	444825	444981	445137	445293	445449	156
279	446382	446537	446692	446848	447003	155
280	447933	448088	448242	448397	448552	155
281	449478	449633	449787	449941	450095	154
282	451018	451172	451326	451479	451633	154
283	452553	452706	452859	453012	453165	153
284	454082	454235	454387	454540	454692	153
285	455606	455758	455910	456062	456214	152
286	457125	457276	457428	457579	457731	152
287	458638	458789	458940	459091	459242	151
288	460146	460296	460447	460597	460748	150
289	461649	461799	461948	462098	462248	150
290	463146	463296	463445	463594	463744	149
291	464639	464788	464936	465085	465234	149
292	466126	466274	466423	466571	466719	148
293	467608	467756	467904	468052	468200	148
294	469085	469233	469380	469527	469675	147
295	470557	470704	470851	470998	471145	147
296	472025	472171	472318	472464	472610	146
297	473487	473633	473779	473925	474071	146
298	474944	475090	475235	475381	475526	146
299	476397	476542	476687	476832	476976	145

o 2

Log. 477. No. 300.

No.	0	1	2	3	4	Diff.
300	477121	477266	477411	477555	477700	145
301	478566	478711	478855	478999	479143	144
302	480007	480151	480294	480438	480582	144
303	481443	481586	481729	481872	482016	143
304	482874	483016	483159	483302	483445	143
305	484300	484442	484585	484727	484869	142
306	485721	485863	486005	486147	486289	142
307	487138	487280	487421	487563	487704	141
308	488551	488692	488833	488974	489114	141
309	489958	490099	490239	490380	490520	140
310	491362	491502	491642	491782	491922	140
311	492760	492900	493040	493179	493319	139
312	494155	494294	494433	494572	494711	139
313	495544	495683	495822	495960	496099	138
314	496930	497068	497206	497344	497483	138
315	498311	498448	498586	498724	498862	138
316	499687	499824	499962	500099	500236	137
317	501059	501196	501333	501470	501607	137
318	502427	502564	502700	502837	502973	136
319	503791	503927	504063	504199	504335	136
320	505150	505286	505421	505557	505693	136
321	506505	506640	506776	506911	507046	135
322	507856	507991	508126	508260	508395	135
323	509203	509337	509471	509606	509740	134
324	510545	510679	510813	510947	511081	134
325	511883	512017	512151	512284	512418	133
326	513218	513351	513484	513617	513750	133
327	514548	514681	514813	514946	515079	133
328	515874	516006	516139	516271	516403	132
329	517196	517328	517460	517592	517724	132
330	518514	518646	518777	518909	519040	131
331	519828	519959	520090	520221	520353	131
332	521138	521269	521400	521530	521661	131
333	522444	522575	522705	522835	522966	130
334	523746	523876	524006	524136	524266	130
335	525045	525174	525304	525434	525563	129
336	526339	526469	526598	526727	526856	129
337	527630	527759	527888	528016	528145	129
338	528917	529045	529174	529302	529430	128
339	530200	530328	530456	530584	530712	128
340	531479	531607	531734	531862	531990	128
341	532754	532882	533009	533136	533264	127
342	534026	534153	534280	534407	534534	127
343	535294	535421	535547	535674	535800	126
344	536558	536685	536811	536937	537063	126
345	537819	537945	538071	538197	538322	126
346	539076	539202	539327	539452	539578	125
347	540329	540455	540580	540705	540830	125
348	541579	541704	541829	541953	542078	125
349	542825	542950	543074	543199	543323	124

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Log. 543. No. 349.

No.	5	6	7	8	9	Diff.
300	477844	477989	478133	478278	478422	145
301	479287	479431	479575	479719	479863	144
302	480725	480869	481012	481156	481299	144
303	482159	482302	482445	482588	482731	143
304	483587	483730	483872	484015	484157	143
305	485011	485153	485295	485437	485579	142
306	486430	486572	486714	486855	486997	142
307	487845	487986	488127	488269	488410	141
308	489255	489396	489537	489677	489818	141
309	490661	490801	490941	491081	491222	140
310	492062	492201	492341	492481	492621	139
311	493458	493597	493737	493876	494015	139
312	494850	494989	495128	495267	495406	139
313	496238	496376	496515	496653	496791	138
314	497621	497759	497897	498035	498173	138
315	498999	499137	499275	499412	499550	138
316	500374	500511	500648	500785	500922	137
317	501744	501880	502017	502154	502291	137
318	503109	503246	503382	503518	503655	136
319	504471	504607	504743	504878	505014	136
320	505828	505964	506099	506234	506370	136
321	507181	507316	507451	507586	507721	135
322	508530	508664	508799	508934	509068	135
323	509874	510009	510143	510277	510411	134
324	511215	511349	511482	511616	511750	134
325	512551	512684	512818	512951	513084	133
326	513883	514016	514149	514282	514415	133
327	515211	515344	515476	515609	515741	133
328	516535	516668	516800	516932	517064	132
329	517855	517987	518119	518251	518382	132
330	519171	519303	519434	519566	519697	131
331	520484	520615	520745	520876	521007	131
332	521792	521922	522053	522183	522314	131
333	523096	523226	523356	523486	523616	130
334	524396	524526	524656	524785	524915	130
335	525693	525822	525951	526081	526210	129
336	526985	527114	527243	527372	527501	129
337	528274	528402	528531	528660	528788	129
338	529559	529687	529815	529943	530072	128
339	530840	530968	531096	531223	531351	128
340	532117	532245	532372	532500	532627	128
341	533391	533518	533645	533772	533899	127
342	534661	534787	534914	535041	535167	127
343	535927	536053	536180	536306	536432	126
344	537189	537315	537441	537567	537693	126
345	538448	538574	538699	538825	538951	126
346	539703	539829	539954	540079	540204	125
347	540955	541080	541205	541330	541454	125
348	542203	542327	542452	542576	542701	125
349	543447	543571	543696	543820	543944	124

Log. 544. No. 350.

No.	0	1	2	3	4	Diff.
350	544068	544192	544316	544440	544564	124
351	545307	545431	545555	545678	545802	124
352	546543	546666	546789	546913	547036	123
353	547775	547898	548021	548144	548267	123
354	549003	549126	549249	549371	549494	123
355	550228	550351	550473	550595	550717	122
356	551450	551572	551694	551816	551938	122
357	552668	552790	552911	553033	553155	121
358	553883	554004	554126	554247	554368	121
359	555094	555215	555336	555457	555578	121
360	556303	556423	556544	556664	556785	120
361	557507	557627	557748	557868	557988	120
362	558709	558829	558948	559068	559188	120
363	559907	560026	560146	560265	560385	119
364	561101	561221	561340	561459	561578	119
365	562293	562412	562531	562650	562769	119
366	563481	563600	563718	563837	563955	119
367	564666	564784	564903	565021	565139	118
368	565848	565966	566084	566202	566320	118
369	567026	567144	567262	567379	567497	118
370	568202	568319	568436	568554	568671	117
371	569374	569491	569608	569725	569842	117
372	570543	570660	570776	570893	571010	117
373	571709	571825	571942	572058	572174	116
374	572872	572988	573104	573220	573336	116
375	574031	574147	574263	574379	574494	116
376	575188	575303	575419	575534	575650	115
377	576341	576457	576572	576687	576802	115
378	577492	577607	577722	577836	577951	115
379	578639	578754	578868	578983	579097	114
380	579784	579898	580012	580126	580241	114
381	580925	581039	581153	581267	581381	114
382	582063	582177	582291	582404	582518	114
383	583199	583312	583426	583539	583652	113
384	584331	584444	584557	584670	584783	113
385	585461	585574	585686	585799	585912	113
386	586587	586700	586812	586925	587037	112
387	587711	587823	587935	588047	588160	112
388	588832	588944	589056	589167	589279	112
389	589950	590061	590173	590284	590396	112
390	591065	591176	591287	591399	591510	111
391	592177	592288	592399	592510	592621	111
392	593286	593397	593508	593618	593729	111
393	594393	594503	594614	594724	594834	110
394	595496	595606	595717	595827	595937	110
395	596597	596707	596817	596927	597037	110
396	597695	597805	597914	598024	598134	110
397	598791	598900	599009	599119	599228	109
398	599883	599992	600101	600210	600319	109
399	600973	601082	601191	601299	601408	109

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No.	5	6	7	8	9	Diff.
350	544688	544812	544936	545060	545183	124
351	545925	546049	546172	546296	546419	124
352	547159	547282	547405	547529	547652	123
353	548389	548512	548635	548758	548881	123
354	549616	549739	549861	549984	550106	123
355	550840	550962	551084	551206	551328	122
356	552060	552181	552303	552425	552547	122
357	553276	553398	553519	553640	553762	121
358	554489	554610	554731	554852	554973	121
359	555699	555820	555940	556061	556182	121
360	556905	557026	557146	557267	557387	120
361	558108	558228	558349	558469	558589	120
362	559308	559428	559548	559667	559787	120
363	560504	560624	560743	560863	560982	119
364	561698	561817	561936	562055	562174	119
365	562887	563006	563125	563244	563362	119
366	564074	564192	564311	564429	564548	119
367	565257	565376	565494	565612	565730	118
368	566437	566555	566673	566791	566909	118
369	567614	567732	567849	567967	568084	118
370	568788	568905	569023	569140	569257	117
371	569959	570076	570193	570309	570426	117
372	571126	571243	571359	571476	571592	117
373	572291	572407	572523	572639	572755	116
374	573452	573568	573684	573800	573915	116
375	574610	574726	574841	574957	575072	116
376	575765	575880	575996	576111	576226	115
377	576917	577032	577147	577262	577377	115
378	578066	578181	578295	578410	578525	115
379	579212	579326	579441	579555	579669	114
380	580355	580469	580583	580697	580811	114
381	581495	581608	581722	581836	581950	114
382	582631	582745	582858	582972	583085	114
383	583765	583879	583992	584105	584218	113
384	584896	585009	585122	585235	585348	113
385	586024	586137	586250	586362	586475	113
386	587149	587262	587374	587486	587599	112
387	588272	588384	588496	588608	588720	112
388	589391	589503	589615	589726	589838	112
389	590507	590619	590730	590842	590953	112
390	591621	591732	591843	591955	592066	111
391	592732	592843	592954	593064	593175	111
392	593840	593950	594061	594171	594282	111
393	594945	595055	595165	595276	595386	110
394	596047	596157	596267	596377	596487	110
395	597146	597256	597366	597476	597586	110
396	598243	598353	598462	598572	598681	110
397	599337	599446	599556	599665	599774	109
398	600428	600537	600646	600755	600864	109
399	601517	601625	601734	601843	601951	109

Log. 602. No. 400.

No.	0	1	2	3	4	Diff.
400	602060	602169	602277	602386	602494	108
401	603144	603253	603361	603469	603577	108
402	604226	604334	604442	604550	604658	108
403	605305	605413	605521	605628	605736	108
404	606381	606489	606596	606704	606811	107
405	607455	607562	607669	607777	607884	107
406	608526	608633	608740	608847	608954	107
407	609594	609701	609808	609914	610021	107
408	610660	610767	610873	610979	611086	106
409	611723	611829	611936	612042	612148	106
410	612784	612890	612996	613102	613207	106
411	613842	613947	614053	614159	614264	106
412	614897	615003	615108	615213	615319	105
413	615950	616055	616160	616265	616370	105
414	617000	617105	617210	617315	617420	105
415	618048	618153	618257	618362	618466	105
416	619093	619198	619302	619406	619511	104
417	620136	620240	620344	620448	620552	104
418	621176	621280	621384	621488	621592	104
419	622214	622318	622421	622525	622628	104
420	623249	623353	623456	623559	623663	103
421	624282	624385	624488	624591	624695	103
422	625312	625415	625518	625621	625724	103
423	626340	626443	626546	626648	626751	103
424	627366	627468	627571	627673	627775	102
425	628389	628491	628593	628695	628797	102
426	629410	629512	629613	629715	629817	102
427	630428	630530	630631	630733	630835	102
428	631444	631545	631647	631748	631849	101
429	632457	632559	632660	632761	632862	101
430	633468	633569	633670	633771	633872	101
431	634477	634578	634679	634779	634880	101
432	635484	635584	635685	635785	635886	100
433	636488	636588	636688	636789	636889	100
434	637490	637590	637690	637790	637890	100
435	638489	638589	638689	638789	638888	100
436	639486	639586	639686	639785	639885	100
437	640481	640581	640680	640779	640879	99
438	641474	641573	641672	641771	641871	99
439	642465	642563	642662	642761	642860	99
440	643453	643551	643650	643749	643847	98
441	644439	644537	644636	644734	644832	98
442	645422	645521	645619	645717	645815	98
443	646404	646502	646600	646698	646796	98
444	647383	647481	647579	647676	647774	98
445	648360	648458	648555	648653	648750	97
446	649335	649432	649530	649627	649724	97
447	650308	650405	650502	650599	650696	97
448	651278	651375	651472	651569	651666	97
449	652246	652343	652440	652536	652633	97

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Log. 653. No. 449.

No.	5	6	7	8	9	Diff.
400	602603	602711	602819	602928	603036	108
401	603686	603794	603902	604010	604118	108
402	604766	604874	604982	605089	605197	108
403	605844	605951	606059	606166	606274	108
404	606919	607026	607133	607241	607348	107
405	607991	608098	608205	608312	608419	107
406	609061	609167	609274	609381	609488	107
407	610128	610234	610341	610447	610554	107
408	611192	611298	611405	611511	611617	106
409	612254	612360	612466	612572	612678	106
410	613313	613419	613525	613630	613736	106
411	614370	614475	614581	614686	614792	106
412	615424	615529	615634	615740	615845	105
413	616476	616581	616686	616790	616895	105
414	617525	617629	617734	617839	617943	105
415	618571	618676	618780	618884	618989	105
416	619615	619719	619824	619928	620032	104
417	620656	620760	620864	620968	621072	104
418	621695	621799	621903	622007	622110	104
419	622732	622835	622939	623042	623146	104
420	623766	623869	623973	624076	624179	103
421	624798	624901	625004	625107	625210	103
422	625827	625929	626032	626135	626238	103
423	626853	626956	627058	627161	627263	103
424	627878	627980	628082	628185	628287	102
425	628900	629002	629104	629206	629308	102
426	629919	630021	630123	630224	630326	102
427	630936	631038	631139	631241	631342	102
428	631951	632052	632153	632255	632356	101
429	632963	633064	633165	633266	633367	101
430	633973	634074	634175	634276	634376	101
431	634981	635081	635182	635283	635383	101
432	635986	636087	636187	636287	636388	100
433	636989	637089	637189	637290	637390	100
434	637990	638090	638190	638290	638389	100
435	638988	639088	639188	639287	639387	100
436	639984	640084	640183	640283	640382	100
437	640978	641077	641177	641276	641375	99
438	641970	642069	642168	642267	642366	99
439	642959	643058	643156	643255	643354	99
440	643946	644044	644143	644242	644340	98
441	644931	645029	645127	645226	645324	98
442	645913	646011	646110	646208	646306	98
443	646894	646992	647089	647187	647285	98
444	647872	647969	648067	648165	648262	98
445	648848	648945	649043	649140	649237	97
446	649821	649919	650016	650113	650210	97
447	650793	650890	650987	651084	651181	97
448	651762	651859	651956	652053	652150	97
449	652730	652826	652923	653019	653116	97

Log. 653. No. 450.

No.	0	1	2	3	4	Diff.
450	653213	653309	653405	653502	653598	96
451	654177	654273	654369	654465	654562	96
452	655138	655235	655331	655427	655523	96
453	656098	656194	656290	656386	656482	96
454	657056	657152	657247	657343	657438	96
455	658011	658107	658202	658298	658393	95
456	658965	659060	659155	659250	659346	95
457	659916	660011	660106	660201	660296	95
458	660865	660960	661055	661150	661245	95
459	661813	661907	662002	662096	662191	94
460	662758	662852	662947	663041	663135	94
461	663701	663795	663889	663983	664078	94
462	664642	664736	664830	664924	665018	94
463	665581	665675	665769	665862	665956	94
464	666518	666612	666705	666799	666892	94
465	667453	667546	667640	667733	667826	93
466	668386	668479	668572	668665	668759	93
467	669317	669410	669503	669596	669689	93
468	670246	670339	670431	670524	670617	93
469	671173	671265	671358	671451	671543	93
470	672098	672190	672283	672375	672467	92
471	673021	673113	673205	673297	673390	92
472	673942	674034	674126	674218	674310	92
473	674861	674953	675045	675137	675228	92
474	675778	675870	675962	676053	676145	92
475	676694	676785	676876	676968	677059	91
476	677607	677698	677789	677881	677972	91
477	678518	678609	678700	678791	678882	91
478	679428	679519	679610	679700	679791	91
479	680336	680426	680517	680607	680698	91
480	681241	681332	681422	681513	681603	90
481	682145	682235	682326	682416	682506	90
482	683047	683137	683227	683317	683407	90
483	683947	684037	684127	684217	684307	90
484	684845	684935	685025	685114	685204	90
485	685742	685831	685921	686010	686100	90
486	686636	686726	686815	686904	686994	89
487	687529	687618	687707	687796	687886	89
488	688420	688509	688598	688687	688776	89
489	689309	689398	689486	689575	689664	89
490	690196	690285	690373	690462	690550	89
491	691081	691170	691258	691347	691435	88
492	691965	692053	692142	692230	692318	88
493	692847	692935	693023	693111	693199	88
494	693727	693815	693903	693991	694078	88
495	694605	694693	694781	694868	694956	88
496	695482	695569	695657	695744	695832	87
497	696356	696444	696531	696618	696706	87
498	697229	697317	697404	697491	697578	87
499	698101	698188	698275	698362	698449	87

For explanation see pp. 207–215

No.	5	6	7	8	9	Diff.
450	653695	653791	653888	653984	654080	96
451	654658	654754	654850	654946	655042	96
452	655619	655715	655810	655906	656002	96
453	656577	656673	656769	656864	656960	96
454	657534	657629	657725	657820	657916	96
455	658488	658584	658679	658774	658870	95
456	659441	659536	659631	659726	659821	95
457	660391	660486	660581	660676	660771	95
458	661339	661434	661529	661623	661718	95
459	662286	662380	662475	662569	662663	94
460	663230	663324	663418	663512	663607	94
461	664172	664266	664360	664454	664548	94
462	665112	665206	665299	665393	665487	94
463	666050	666143	666237	666331	666424	94
464	666986	667079	667173	667266	667360	94
465	667920	668013	668106	668199	668293	93
466	668852	668945	669038	669131	669224	93
467	669782	669875	669967	670060	670153	93
468	670710	670802	670895	670988	671080	93
469	671636	671728	671821	671913	672005	92
470	672560	672652	672744	672836	672929	92
471	673482	673574	673666	673758	673850	92
472	674402	674494	674586	674677	674769	92
473	675320	675412	675503	675595	675687	92
474	676236	676328	676419	676511	676602	92
475	677151	677242	677333	677424	677516	91
476	678063	678154	678245	678336	678427	91
477	678973	679064	679155	679246	679337	91
478	679882	679973	680063	680154	680245	91
479	680789	680879	680970	681060	681151	91
480	681693	681784	681874	681964	682055	90
481	682596	682686	682777	682867	682957	90
482	683497	683587	683677	683767	683857	90
483	684396	684486	684576	684666	684756	90
484	685294	685383	685473	685563	685652	90
485	686189	686279	686368	686458	686547	90
486	687083	687172	687261	687351	687440	89
487	687975	688064	688153	688242	688331	89
488	688865	688953	689042	689131	689220	89
489	689753	689841	689930	690019	690107	89
490	690639	690728	690816	690905	690993	89
491	691524	691612	691700	691789	691877	88
492	692406	692494	692583	692671	692759	88
493	693287	693375	693463	693551	693639	88
494	694166	694254	694342	694430	694517	88
495	695044	695131	695219	695307	695394	88
496	695919	696007	696094	696182	696269	87
497	696793	696880	696968	697055	697142	87
498	697665	697752	697839	697926	698014	87
499	698535	698622	698709	698796	698883	87

Log. 698. No. 500.

No.	0	1	2	3	4	Diff.
500	698970	699057	699144	699231	699317	87
501	699838	699924	700011	700098	700184	87
502	700704	700790	700877	700963	701050	86
503	701568	701654	701741	701827	701913	86
504	702431	702517	702603	702689	702775	86
505	703291	703377	703463	703549	703635	86
506	704151	704236	704322	704408	704494	86
507	705008	705094	705179	705265	705350	86
508	705864	705949	706035	706120	706206	85
509	706718	706803	706888	706974	707059	85
510	707570	707655	707740	707826	707911	85
511	708421	708506	708591	708676	708761	85
512	709270	709355	709440	709524	709609	85
513	710117	710202	710287	710371	710456	85
514	710963	711048	711132	711217	711301	84
515	711807	711892	711976	712060	712144	84
516	712650	712734	712818	712902	712986	84
517	713491	713575	713659	713742	713826	84
518	714330	714414	714497	714581	714665	84
519	715167	715251	715335	715418	715502	84
520	716003	716087	716170	716254	716337	83
521	716838	716921	717004	717088	717171	83
522	717671	717754	717837	717920	718003	83
523	718502	718585	718668	718751	718834	83
524	719331	719414	719497	719580	719663	83
525	720159	720242	720325	720407	720490	83
526	720986	721068	721151	721233	721316	83
527	721811	721893	721975	722058	722140	82
528	722634	722716	722798	722881	722963	82
529	723456	723538	723620	723702	723784	82
530	724276	724358	724440	724522	724604	82
531	725095	725176	725258	725340	725422	82
532	725912	725993	726075	726156	726238	82
533	726727	726809	726890	726972	727053	81
534	727541	727623	727704	727785	727866	81
535	728354	728435	728516	728597	728678	81
536	729165	729246	729327	729408	729489	81
537	729974	730055	730136	730217	730298	81
538	730782	730863	730944	731024	731105	81
539	731589	731669	731750	731830	731911	81
540	732394	732474	732555	732635	732715	80
541	733197	733278	733358	733438	733518	80
542	733999	734079	734160	734240	734320	80
543	734800	734880	734960	735040	735120	80
544	735599	735679	735759	735838	735918	80
545	736397	736476	736556	736635	736715	80
546	737193	737272	737352	737431	737511	79
547	737987	738067	738146	738225	738305	79
548	738781	738860	738939	739018	739097	79
549	739572	739651	739731	739810	739889	79

Log. **740.** No. 549.

No.	5	6	7	8	9	Diff.
500	699404	699491	699578	699664	699751	87
501	700271	700358	700444	700531	700617	87
502	701136	701222	701309	701395	701482	86
503	701999	702086	702172	702258	702344	86
504	702861	702947	703033	703119	703205	86
505	703721	703807	703893	703979	704065	86
506	704579	704665	704751	704837	704922	86
507	705436	705522	705607	705693	705778	86
508	706291	706376	706462	706547	706632	85
509	707144	707229	707315	707400	707485	85
510	707996	708081	708166	708251	708336	85
511	708846	708931	709015	709100	709185	85
512	709694	709779	709863	709948	710033	85
513	710540	710625	710710	710794	710879	85
514	711385	711470	711554	711639	711723	84
515	712229	712313	712397	712481	712566	84
516	713070	713154	713238	713323	713407	84
517	713910	713994	714078	714162	714246	84
518	714749	714833	714916	715000	715084	84
519	715586	715669	715753	715836	715920	84
520	716421	716504	716588	716671	716754	83
521	717254	717338	717421	717504	717587	83
522	718086	718169	718253	718336	718419	83
523	718917	719000	719083	719165	719248	83
524	719745	719828	719911	719994	720077	83
525	720573	720655	720738	720821	720903	83
526	721398	721481	721563	721646	721728	83
527	722222	722305	722387	722469	722552	82
528	723045	723127	723209	723291	723374	82
529	723866	723948	724030	724112	724194	82
530	724685	724767	724849	724931	725013	82
531	725503	725585	725667	725748	725830	82
532	726320	726401	726483	726564	726646	82
533	727134	727216	727297	727379	727460	81
534	727948	728029	728110	728191	728273	81
535	728759	728841	728922	729003	729084	81
536	729570	729651	729732	729813	729893	81
537	730378	730459	730540	730621	730702	81
538	731186	731266	731347	731428	731508	81
539	731991	732072	732152	732233	732313	81
540	732796	732876	732956	733037	733117	80
541	733598	733679	733759	733839	733919	80
542	734400	734480	734560	734640	734720	80
543	735200	735279	735359	735439	735519	80
544	735998	736078	736157	736237	736317	80
545	736795	736874	736954	737034	737113	80
546	737590	737670	737749	737829	737908	79
547	738384	738463	738543	738622	738701	79
548	739177	739256	739335	739414	739493	79
549	739968	740047	740126	740205	740284	79

Log. 740. No. 550.

No.	0	1	2	3	4	Diff.
550	740363	740442	740521	740600	740678	79
551	741152	741230	741309	741388	741467	79
552	741939	742018	742096	742175	742254	79
553	742725	742804	742882	742961	743039	78
554	743510	743588	743667	743745	743823	78
555	744293	744371	744449	744528	744606	78
556	745075	745153	745231	745309	745387	78
557	745855	745933	746011	746089	746167	78
558	746634	746712	746790	746868	746945	78
559	747412	747489	747567	747645	747722	78
560	748188	748266	748343	748421	748498	77
561	748963	749040	749118	749195	749272	77
562	749736	749814	749891	749968	750045	77
563	750508	750586	750663	750740	750817	77
564	751279	751356	751433	751510	751587	77
565	752048	752125	752202	752279	752356	77
566	752816	752893	752970	753047	753123	77
567	753583	753660	753736	753813	753889	77
568	754348	754425	754501	754578	754654	76
569	755112	755189	755265	755341	755417	76
570	755875	755951	756027	756103	756180	76
571	756636	756712	756788	756864	756940	76
572	757396	757472	757548	757624	757700	76
573	758155	758230	758306	758382	758458	76
574	758912	758988	759063	759139	759214	76
575	759668	759743	759819	759894	759970	75
576	760422	760498	760573	760649	760724	75
577	761176	761251	761326	761402	761477	75
578	761928	762003	762078	762153	762228	75
579	762679	762754	762829	762904	762978	75
580	763428	763503	763578	763653	763727	75
581	764176	764251	764326	764400	764475	75
582	764923	764998	765072	765147	765221	75
583	765669	765743	765818	765892	765966	74
584	766413	766487	766562	766636	766710	74
585	767156	767230	767304	767379	767453	74
586	767898	767972	768046	768120	768194	74
587	768638	768712	768786	768860	768934	74
588	769377	769451	769525	769599	769673	74
589	770115	770189	770263	770336	770410	74
590	770852	770926	770999	771073	771146	74
591	771587	771661	771734	771808	771881	73
592	772322	772395	772468	772542	772615	73
593	773055	773128	773201	773274	773348	73
594	773786	773860	773933	774006	774079	73
595	774517	774590	774663	774736	774809	73
596	775246	775319	775392	775465	775538	73
597	775974	776047	776120	776193	776265	73
598	776701	776774	776846	776919	776992	73
599	777427	777499	777572	777644	777717	72

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Log. 778. No. 599.

No.	5	6	7	8	9	Diff.
550	740757	740836	740915	740994	741073	79
551	741546	741624	741703	741782	741860	79
552	742332	742411	742489	742568	742647	79
553	743118	743196	743275	743353	743431	78
554	743902	743980	744058	744136	744215	78
555	744684	744762	744840	744919	744997	78
556	745465	745543	745621	745699	745777	78
557	746245	746323	746401	746479	746556	78
558	747023	747101	747179	747256	747334	78
559	747800	747878	747955	748033	748110	78
560	748576	748653	748731	748808	748885	77
561	749350	749427	749504	749582	749659	77
562	750123	750200	750277	750354	750431	77
563	750894	750971	751048	751125	751202	77
564	751664	751741	751818	751895	751972	77
565	752433	752509	752586	752663	752740	77
566	753200	753277	753353	753430	753506	77
567	753966	754042	754119	754195	754272	77
568	754730	754807	754883	754960	755036	76
569	755494	755570	755646	755722	755799	76
570	756256	756332	756408	756484	756560	76
571	757016	757092	757168	757244	757320	76
572	757775	757851	757927	758003	758079	76
573	758533	758609	758685	758761	758836	76
574	759290	759366	759441	759517	759592	76
575	760045	760121	760196	760272	760347	75
576	760799	760875	760950	761025	761101	75
577	761552	761627	761702	761778	761853	75
578	762303	762378	762453	762529	762604	75
579	763053	763128	763203	763278	763353	75
580	763802	763877	763952	764027	764101	75
581	764550	764624	764699	764774	764848	75
582	765296	765370	765445	765520	765594	75
583	766041	766115	766190	766264	766338	74
584	766785	766859	766933	767007	767082	74
585	767527	767601	767675	767749	767823	74
586	768268	768342	768416	768490	768564	74
587	769008	769082	769156	769230	769303	74
588	769746	769820	769894	769968	770042	74
589	770484	770557	770631	770705	770778	74
590	771220	771293	771367	771440	771514	74
591	771955	772028	772102	772175	772248	73
592	772688	772762	772835	772908	772981	73
593	773421	773494	773567	773640	773713	73
594	774152	774225	774298	774371	774444	73
595	774882	774955	775028	775100	775173	73
596	775610	775683	775756	775829	775902	73
597	776338	776411	776483	776556	776629	73
598	777064	777137	777209	777282	777354	73
599	777789	777862	777934	778006	778079	72

Log. 778. No. 600.

No.	0	1	2	3	4	Diff.
600	778151	778224	778296	778368	778441	72
601	778874	778947	779019	779091	779163	72
602	779596	779669	779741	779813	779885	72
603	780317	780389	780461	780533	780605	72
604	781037	781109	781181	781253	781324	72
605	781755	781827	781899	781971	782042	72
606	782473	782544	782616	782688	782759	72
607	783189	783260	783332	783403	783475	71
608	783904	783975	784046	784118	784189	71
609	784617	784689	784760	784831	784902	71
610	785330	785401	785472	785543	785615	71
611	786041	786112	786183	786254	786325	71
612	786751	786822	786893	786964	787035	71
613	787460	787531	787602	787673	787744	71
614	788168	788239	788310	788381	788451	71
615	788875	788946	789016	789087	789157	71
616	789581	789651	789722	789792	789863	70
617	790285	790356	790426	790496	790567	70
618	790988	791059	791129	791199	791269	70
619	791691	791761	791831	791901	791971	70
620	792392	792462	792532	792602	792672	70
621	793092	793162	793231	793301	793371	70
622	793790	793860	793930	794000	794070	70
623	794488	794558	794627	794697	794767	70
624	795185	795254	795324	795393	795463	70
625	795880	795949	796019	796088	796158	69
626	796574	796644	796713	796782	796852	69
627	797268	797337	797406	797475	797545	69
628	797960	798029	798098	798167	798236	69
629	798651	798720	798789	798858	798927	69
630	799341	799409	799478	799547	799616	69
631	800029	800098	800167	800236	800305	69
632	800717	800786	800854	800923	800992	69
633	801404	801472	801541	801609	801678	69
634	802089	802158	802226	802295	802363	69
635	802774	802842	802910	802979	803047	68
636	803457	803525	803594	803662	803730	68
637	804139	804208	804276	804344	804412	68
638	804821	804889	804957	805025	805093	68
639	805501	805569	805637	805705	805773	68
640	806180	806248	806316	806384	806451	68
641	806858	806926	806994	807061	807129	68
642	807535	807603	807670	807738	807806	68
643	808211	808279	808346	808414	808481	67
644	808886	808953	809021	809088	809156	67
645	809560	809627	809694	809762	809829	67
646	810233	810300	810367	810434	810501	67
647	810904	810971	811039	811106	811173	67
648	811575	811642	811709	811776	811843	67
649	812245	812312	812379	812445	812512	67

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Log. 812. No. 649.

No.	5	6	7	8	9	Diff.
600	778513	778585	778658	778730	778802	72
601	779236	779308	779380	779452	779524	72
602	779957	780029	780101	780173	780245	72
603	780677	780749	780821	780893	780965	72
604	781396	781468	781540	781612	781684	72
605	782114	782186	782258	782329	782401	72
606	782831	782902	782974	783046	783117	72
607	783546	783618	783689	783761	783832	71
608	784261	784332	784403	784475	784546	71
609	784974	785045	785116	785187	785259	71
610	785686	785757	785828	785899	785970	71
611	786396	786467	786538	786609	786680	71
612	787106	787177	787248	787319	787390	71
613·	787815	787885	787956	788027	788098	71
614	788522	788593	788663	788734	788804	71
615	789228	789299	789369	789440	789510	71
616	789933	790004	790074	790144	790215	70
617	790637	790707	790778	790848	790918	70
618	791340	791410	791480	791550	791620	70
619	792041	792111	792181	792252	792322	70
620	792742	792812	792882	792952	793022	70
621	793441	793511	793581	793651	793721	70
622	794139	794209	794279	794349	794418	70
623	794836	794906	794976	795045	795115	70
624	795532	795602	795672	795741	795811	70
625	796227	796297	796366	796436	796505	69
626	796921	796990	797060	797129	797198	69
627	797614	797683	797752	797821	797890	69
628	798305	798374	798443	798513	798582	69
629	798996	799065	799134	799203	799272	69
630	799685	799754	799823	799892	799961	69
631	800373	800442	800511	800580	800648	69
632	801061	801129	801198	801266	801335	69
633	801747	801815	801884	801952	802021	69
634	802432	802500	802568	802637	802705	69
635	803116	803184	803252	803321	803389	68
636	803798	803867	803935	804003	804071	68
637	804480	804548	804616	804685	804753	68
638	805161	805229	805297	805365	805433	68
639	805841	805908	805976	806044	806112	68
640	806519	806587	806655	806723	806790	68
641	807197	807264	807332	807400	807467	68
642	807873	807941	808008	808076	808143	68
643	808549	808616	808684	808751	808818	67
644	809223	809290	809358	809425	809492	67
645	809896	809964	810031	810098	810165	67
646	810569	810636	810703	810770	810837	67
647	811240	811307	811374	811441	811508	67
648	811910	811977	812044	812111	812178	67
649	812579	812646	812713	812780	812847	67

Log. 812. No. 650.

No.	0	1	2	3	4	Diff.
650	812913	812980	813047	813114	813181	67
651	813581	813648	813714	813781	813848	67
652	814248	814314	814381	814447	814514	67
653	814913	814980	815046	815113	815179	66
654	815578	815644	815711	815777	815843	66
655	816241	816308	816374	816440	816506	66
656	816904	816970	817036	817102	817169	66
657	817565	817631	817698	817764	817830	66
658	818226	818292	818358	818424	818490	66
659	818885	818951	819017	819083	819149	66
660	819544	819610	819676	819741	819807	66
661	820201	820267	820333	820399	820464	66
662	820858	820924	820989	821055	821120	66
663	821514	821579	821645	821710	821775	65
664	822168	822233	822299	822364	822430	65
665	822822	822887	822952	823018	823083	65
666	823474	823539	823605	823670	823735	65
667	824126	824191	824256	824321	824386	65
668	824776	824841	824906	824971	825036	65
669	825426	825491	825556	825621	825686	65
670	826075	826140	826204	826269	826334	65
671	826723	826787	826852	826917	826981	65
672	827369	827434	827499	827563	827628	65
673	828015	828080	828144	828209	828273	64
674	828660	828724	828789	828853	828918	64
675	829304	829368	829432	829497	829561	64
676	829947	830011	830075	830139	830204	64
677	830589	830653	830717	830781	830845	64
678	831230	831294	831358	831422	831486	64
679	831870	831934	831998	832062	832126	64
680	832509	832573	832637	832700	832764	64
681	833147	833211	833275	833338	833402	64
682	833784	833848	833912	833975	834039	64
683	834421	834484	834548	834611	834675	64
684	835056	835120	835183	835247	835310	63
685	835691	835754	835817	835881	835944	63
686	836324	836387	836451	836514	836577	63
687	836957	837020	837083	837146	837210	63
688	837588	837652	837715	837778	837841	63
689	838219	838282	838345	838408	838471	63
690	838849	838912	838975	839038	839101	63
691	839478	839541	839604	839667	839729	63
692	840106	840169	840232	840294	840357	63
693	840733	840796	840859	840921	840984	63
694	841359	841422	841485	841547	841610	63
695	841985	842047	842110	842172	842235	62
696	842609	842672	842734	842796	842859	62
697	843233	843295	843357	843420	843482	62
698	843855	843918	843980	844042	844104	62
699	844477	844539	844601	844664	844726	62

For explanation see pp. 2°7–215

Log. 845. No. 699.

No.	5	6	7	8	9	Diff.
650	813247	813314	813381	813448	813514	67
651	813914	813981	814048	814114	814181	67
652	814581	814647	814714	814780	814847	67
653	815246	815312	815378	815445	815511	66
654	815910	815976	816042	816109	816175	66
655	816573	816639	816705	816771	816838	66
656	817235	817301	817367	817433	817499	66
657	817896	817962	818028	818094	818160	66
658	818556	818622	818688	818754	818820	66
659	819215	819281	819346	819412	819478	66
660	819873	819939	820004	820070	820136	66
661	820530	820595	820661	820727	820792	66
662	821186	821251	821317	821382	821448	66
663	821841	821906	821972	822037	822103	65
664	822495	822560	822626	822691	822756	65
665	823148	823213	823279	823344	823409	65
666	823800	823865	823930	823996	824061	65
667	824451	824516	824581	824646	824711	65
668	825101	825166	825231	825296	825361	65
669	825751	825815	825880	825945	826010	65
670	826399	826464	826528	826593	826658	65
671	827046	827111	827175	827240	827305	65
672	827692	827757	827821	827886	827951	65
673	828338	828402	828467	828531	828595	64
674	828982	829046	829111	829175	829239	64
675	829625	829690	829754	829818	829882	64
676	830268	830332	830396	830460	830525	64
677	830909	830973	831037	831102	831166	64
678	831550	831614	831678	831742	831806	64
679	832189	832253	832317	832381	832445	64
680	832828	832892	832956	833020	833083	64
681	833466	833530	833593	833657	833721	64
682	834103	834166	834230	834294	834357	64
683	834739	834802	834866	834929	834993	64
684	835373	835437	835500	835564	835627	63
685	836007	836071	836134	836197	836261	63
686	836641	836704	836767	836830	836894	63
687	837273	837336	837399	837462	837525	63
688	837904	837967	838030	838093	838156	63
689	838534	838597	838660	838723	838786	63
690	839164	839227	839289	839352	839415	63
691	839792	839855	839918	839981	840043	63
692	840420	840482	840545	840608	840671	63
693	841046	841109	841172	841234	841297	63
694	841672	841735	841797	841860	841922	63
695	842297	842360	842422	842484	842547	62
696	842921	842983	843046	843108	843170	62
697	843544	843606	843669	843731	843793	62
698	844166	844229	844291	844353	844415	62
699	844788	844850	844912	844974	845036	62

Log. 845. No. 700.

No.	0	1	2	3	4	Diff.
700	845098	845160	845222	845284	845346	62
701	845718	845780	845842	845904	845966	62
702	846337	846399	846461	846523	846585	62
703	846955	847017	847079	847141	847202	62
704	847573	847634	847696	847758	847819	62
705	848189	848251	848312	848374	848435	62
706	848805	848866	848928	848989	849051	61
707	849419	849481	849542	849604	849665	61
708	850033	850095	850156	850217	850279	61
709	850646	850707	850769	850830	850891	61
710	851258	851320	851381	851442	851503	61
711	851870	851931	851992	852053	852114	61
712	852480	852541	852602	852663	852724	61
713	853090	853150	853211	853272	853333	61
714	853698	853759	853820	853881	853941	61
715	854306	854367	854428	854488	854549	61
716	854913	854974	855034	855095	855156	61
717	855519	855580	855640	855701	855761	61
718	856124	856185	856245	856306	856366	60
719	856729	856789	856850	856910	856970	60
720	857332	857393	857453	857513	857574	60
721	857935	857995	858056	858116	858176	60
722	858537	858597	858657	858718	858778	60
723	859138	859198	859258	859318	859379	60
724	859739	859799	859859	859918	859978	60
725	860338	860398	860458	860518	860578	60
726	860937	860996	861056	861116	861176	60
727	861534	861594	861654	861714	861773	60
728	862131	862191	862251	862310	862370	60
729	862728	862787	862847	862906	862966	60
730	863323	863382	863442	863501	863561	59
731	863917	863977	864036	864096	864155	59
732	864511	864570	864630	864689	864748	59
733	865104	865163	865222	865282	865341	59
734	865696	865755	865814	865874	865933	59
735	866287	866346	866405	866465	866524	59
736	866878	866937	866996	867055	867114	59
737	867467	867526	867585	867644	867703	59
738	868056	868115	868174	868233	868292	59
739	868644	868703	868762	868821	868879	59
740	869232	869290	869349	869408	869466	59
741	869818	869877	869935	869994	870053	59
742	870404	870462	870521	870579	870638	58
743	870989	871047	871106	871164	871223	58
744	871573	871631	871690	871748	871806	58
745	872156	872215	872273	872331	872389	58
746	872739	872797	872855	872913	872972	58
747	873321	873379	873437	873495	873553	58
748	873902	873960	874018	874076	874134	58
749	874482	874540	874598	874656	874714	58

For explanation see pp. 207-215

Log. 875. No. 749.

No.	5	6	7	8	9	Diff.
700	845408	845470	845532	845594	845656	62
701	846028	846090	846151	846213	846275	62
702	846646	846708	846770	846832	846894	62
703	847264	847326	847388	847449	847511	62
704	847881	847943	848004	848066	848128	62
705	848497	848559	848620	848682	848743	62
706	849112	849174	849235	849297	849358	61
707	849726	849788	849849	849911	849972	61
708	850340	850401	850462	850524	850585	61
709	850952	851014	851075	851136	851197	61
710	851564	851625	851686	851747	851809	61
711	852175	852236	852297	852358	852419	61
712	852785	852846	852907	852968	853029	61
713	853394	853455	853516	853577	853637	61
714	854002	854063	854124	854185	854245	61
715	854610	854670	854731	854792	854852	61
716	855216	855277	855337	855398	855459	61
717	855822	855882	855943	856003	856064	61
718	856427	856487	856548	856608	856668	60
719	857031	857091	857152	857212	857272	60
720	857634	857694	857755	857815	857875	60
721	858236	858297	858357	858417	858477	60
722	858838	858898	858958	859018	859078	60
723	859439	859499	859559	859619	859679	60
724	860038	860098	860158	860218	860278	60
725	860637	860697	860757	860817	860877	60
726	861236	861295	861355	861415	861475	60
727	861833	861893	861952	862012	862072	60
728	862430	862489	862549	862608	862668	60
729	863025	863085	863144	863204	863263	60
730	863620	863680	863739	863799	863858	59
731	864214	864274	864333	864392	864452	59
732	864808	864867	864926	864985	865045	59
733	865400	865459	865519	865578	865637	59
734	865992	866051	866110	866169	866228	59
735	866583	866642	866701	866760	866819	59
736	867173	867232	867291	867350	867409	59
737	867762	867821	867880	867939	867998	59
738	868350	868409	868468	868527	868586	59
739	868938	868997	869056	869114	869173	59
740	869525	869584	869642	869701	869760	59
741	870111	870170	870228	870287	870345	59
742	870696	870755	870813	870872	870930	58
743	871281	871339	871398	871456	871515	58
744	871865	871923	871981	872040	872098	58
745	872448	872506	872564	872622	872681	58
746	873030	873088	873146	873204	873262	58
747	873611	873669	873727	873785	873844	58
748	874192	874250	874308	874366	874424	58
749	874772	874830	874888	874945	875003	58

Log. 875. No. 750.

No.	0	1	2	3	4	Diff.
750	875061	875119	875177	875235	875293	58
751	875640	875698	875756	875813	875871	58
752	876218	876276	876333	876391	876449	58
753	876795	876853	876910	876968	877026	58
754	877371	877429	877487	877544	877602	58
755	877947	878004	878062	878119	878177	57
756	878522	878579	878637	878694	878752	57
757	879096	879153	879211	879268	879325	57
758	879669	879726	879784	879841	879898	57
759	880242	880299	880356	880413	880471	57
760	880814	880871	880928	880985	881042	57
761	881385	881442	881499	881556	881613	57
762	881955	882012	882069	882126	882183	57
763	882525	882581	882638	882695	882752	57
764	883093	883150	883207	883264	883321	57
765	883661	883718	883775	883832	883888	57
766	884229	884285	884342	884399	884455	57
767	884795	884852	884909	884965	885022	57
768	885361	885418	885474	885531	885587	57
769	885926	885983	886039	886096	886152	56
770	886491	886547	886604	886660	886716	56
771	887054	887111	887167	887223	887280	56
772	887617	887674	887730	887786	887842	56
773	888179	888236	888292	888348	888404	56
774	888741	888797	888853	888909	888965	56
775	889302	889358	889414	889470	889526	56
776	889862	889918	889974	890030	890086	56
777	890421	890477	890533	890589	890645	56
778	890980	891035	891091	891147	891203	56
779	891537	891593	891649	891705	891760	56
780	892095	892150	892206	892262	892317	56
781	892651	892707	892762	892818	892873	56
782	893207	893262	893318	893373	893429	56
783	893762	893817	893873	893928	893984	55
784	894316	894371	894427	894482	894538	55
785	894870	894925	894980	895036	895091	55
786	895423	895478	895533	895588	895644	55
787	895975	896030	896085	896140	896195	55
788	896526	896581	896636	896692	896747	55
789	897077	897132	897187	897242	897297	55
790	897627	897682	897737	897792	897847	55
791	898176	898231	898286	898341	898396	55
792	898725	898780	898835	898890	898944	55
793	899273	899328	899383	899437	899492	55
794	899821	899875	899930	899985	900039	55
795	900367	900422	900476	900531	900586	55
796	900913	900968	901022	901077	901131	55
797	901458	901513	901567	901622	901676	54
798	902003	902057	902112	902166	902221	54
799	902547	902601	902655	902710	902764	54

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Log. 903. No. 799.

No.	5	6	7	8	9	Diff.
750	875351	875409	875466	875524	875582	58
751	875929	875987	876045	876102	876160	58
752	876507	876564	876622	876680	876737	58
753	877083	877141	877199	877256	877314	58
754	877659	877717	877774	877832	877889	58
755	878234	878292	878349	878407	878464	57
756	878809	878866	878924	878981	879039	57
757	879383	879440	879497	879555	879612	57
758	879956	880013	880070	880127	880185	57
759	880528	880585	880642	880699	880756	57
760	881099	881156	881213	881271	881328	57
761	881670	881727	881784	881841	881898	57
762	882240	882297	882354	882411	882468	57
763	882809	882866	882923	882980	883037	57
764	883377	883434	883491	883548	883605	57
765	883945	884002	884059	884115	884172	57
766	884512	884569	884625	884682	884739	57
767	885078	885135	885192	885248	885305	57
768	885644	885700	885757	885813	885870	57
769	886209	886265	886321	886378	886434	56
770	886773	886829	886885	886942	886998	56
771	887336	887392	887449	887505	887561	56
772	887898	887955	888011	888067	888123	56
773	888460	888516	888573	888629	888685	56
774	889021	889077	889134	889190	889246	56
775	889582	889638	889694	889750	889806	56
776	890141	890197	890253	890309	890365	56
777	890700	890756	890812	890868	890924	56
778	891259	891314	891370	891426	891482	56
779	891816	891872	891928	891983	892039	56
780	892373	892429	892484	892540	892595	56
781	892929	892985	893040	893096	893151	56
782	893484	893540	893595	893651	893706	56
783	894039	894094	894150	894205	894261	55
784	894593	894648	894704	894759	894814	55
785	895146	895201	895257	895312	895367	55
786	895699	895754	895809	895864	895920	55
787	896251	896306	896361	896416	896471	55
788	896802	896857	896912	896967	897022	55
789	897352	897407	897462	897517	897572	55
790	897902	897957	898012	898067	898122	55
791	898451	898506	898561	898615	898670	55
792	898999	899054	899109	899164	899218	55
793	899547	899602	899656	899711	899766	55
794	900094	900149	900203	900258	900312	55
795	900640	900695	900749	900804	900859	55
796	901186	901240	901295	901349	901404	55
797	901731	901785	901840	901894	901948	54
798	902275	902329	902384	902438	902492	54
799	902818	902873	902927	902981	903036	54

Log. 903. No. 800.

No.	0	1	2	3	4	Diff.
800	903090	903144	903199	903253	903307	54
801	903633	903687	903741	903795	903849	54
802	904174	904229	904283	904337	904391	54
803	904716	904770	904824	904878	904932	54
804	905256	905310	905364	905418	905472	54
805	905796	905850	905904	905958	906012	54
806	906335	906389	906443	906497	906551	54
807	906874	906927	906981	907035	907089	54
808	907411	907465	907519	907573	907626	54
809	907949	908002	908056	908110	908163	54
810	908485	908539	908592	908649	908699	54
811	909021	909074	909128	909181	909235	54
812	909556	909610	909663	909716	909770	53
813	910091	910144	910197	910251	910304	53
814	910624	910678	910731	910784	910838	53
815	911158	911211	911264	911317	911371	53
816	911690	911743	911797	911850	911903	53
817	912222	912275	912328	912381	912435	53
818	912753	912806	912859	912913	912966	53
819	913284	913337	913390	913443	913496	53
820	913814	913867	913920	913973	914026	53
821	914343	914396	914449	914502	914555	53
822	914872	914925	914977	915030	915083	53
823	915400	915453	915505	915558	915611	53
824	915927	915980	916033	916085	916138	53
825	916454	916507	916559	916612	916664	53
826	916980	917033	917085	917138	917190	53
827	917506	917558	917611	917663	917716	52
828	918030	918083	918135	918188	918240	52
829	918555	918607	918659	918712	918764	52
830	919078	919130	919183	919235	919287	52
831	919601	919653	919706	919758	919810	52
832	920123	920176	920228	920280	920332	52
833	920645	920697	920749	920801	920853	52
834	921166	921218	921270	921322	921374	52
835	921686	921738	921790	921842	921894	52
836	922206	922258	922310	922362	922414	52
837	922725	922777	922829	922881	922933	52
838	923244	923296	923348	923399	923451	52
839	923762	923814	923865	923917	923969	52
840	924279	924331	924383	924434	924486	52
841	924796	924848	924899	924951	925003	52
842	925312	925364	925415	925467	925518	52
843	925828	925879	925931	925982	926034	51
844	926342	926394	926445	926497	926548	51
845	926857	926908	926959	927011	927062	51
846	927370	927422	927473	927524	927576	51
847	927883	927935	927986	928037	928088	51
848	928396	928447	928498	928549	928601	51
849	928908	928959	929010	929061	929112	51

For explanation see pp. 207–215

No.	5	6	7	8	9	Diff.
800	903361	903416	903470	903524	903578	54
801	903904	903958	904012	904066	904120	54
802	904445	904499	904553	904607	904661	54
803	904986	905040	905094	905148	905202	54
804	905526	905580	905634	905688	905742	54
805	906066	906119	906173	906227	906281	54
806	906604	906658	906712	906766	906820	54
807	907143	907196	907250	907304	907358	54
808	907680	907734	907787	907841	907895	54
809	908217	908270	908324	908378	908431	54
810	908753	908807	908860	908914	908967	54
811	909289	909342	909396	909449	909503	54
812	909823	909877	909930	909984	910037	53
813	910358	910411	910464	910518	910571	53
814	910891	910944	910998	911051	911104	53
815	911424	911477	911530	911584	911637	53
816	911956	912009	912063	912116	912169	53
817	912488	912541	912594	912647	912700	53
818	913019	913072	913125	913178	913231	53
819	913549	913602	913655	913708	913761	53
820	914079	914132	914184	914237	914290	53
821	914608	914660	914713	914766	914819	53
822	915136	915189	915241	915294	915347	53
823	915664	915716	915769	915822	915875	53
824	916191	916243	916296	916349	916401	53
825	916717	916770	916822	916875	916927	53
826	917243	917295	917348	917400	917453	53
827	917768	917820	917873	917925	917978	52
828	918293	918345	918397	918450	918502	52
829	918816	918869	918921	918973	919026	52
830	919340	919392	919444	919496	919549	52
831	919862	919914	919967	920019	920071	52
832	920384	920436	920489	920541	920593	52
833	920906	920958	921010	921062	921114	52
834	921426	921478	921530	921582	921634	52
835	921946	921998	922050	922102	922154	52
836	922466	922518	922570	922622	922674	52
837	922985	923037	923089	923140	923192	52
838	923503	923555	923607	923658	923710	52
839	924021	924072	924124	924176	924228	52
840	924538	924589	924641	924693	924744	52
841	925054	925106	925157	925209	925261	52
842	925570	925621	925673	925725	925776	52
843	926085	926137	926188	926240	926291	51
844	926600	926651	926702	926754	926805	51
845	927114	927165	927216	927268	927319	51
846	927627	927678	927730	927781	927832	51
847	928140	928191	928242	928293	928345	51
848	928652	928703	928754	928805	928857	51
849	929163	929215	929266	929317	929368	51

Log. 929. No. 850.

No.	0	1	2	3	4	Diff.
850	929419	929470	929521	929572	929623	51
851	929930	929981	930032	930083	930134	51
852	930440	930491	930542	930592	930643	51
853	930949	931000	931051	931102	931153	51
854	931458	931509	931560	931610	931661	51
855	931966	932017	932068	932118	932169	51
856	932474	932524	932575	932626	932677	51
857	932981	933031	933082	933133	933183	51
858	933487	933538	933589	933639	933690	51
859	933993	934044	934094	934145	934195	51
860	934498	934549	934599	934650	934700	50
861	935003	935054	935104	935154	935205	50
862	935507	935558	935608	935658	935709	50
863	936011	936061	936111	936162	936212	50
864	936514	936564	936614	936665	936715	50
865	937016	937066	937117	937167	937217	50
866	937518	937568	937618	937668	937718	50
867	938019	938069	938119	938169	938219	50
868	938520	938570	938620	938670	938720	50
869	939020	939070	939120	939170	939220	50
870	939519	939569	939619	939669	939719	50
871	940018	940068	940118	940168	940218	50
872	940516	940566	940616	940666	940716	50
873	941014	941064	941114	941163	941213	50
874	941511	941561	941611	941660	941710	50
875	942008	942058	942107	942157	942207	50
876	942504	942554	942603	942653	942702	50
877	943000	943049	943099	943148	943198	49
878	943495	943544	943593	943643	943692	49
879	943989	944038	944088	944137	944186	49
880	944483	944532	944581	944631	944680	49
881	944976	945025	945074	945124	945173	49
882	945469	945518	945567	945616	945665	49
883	945961	946010	946059	946108	946157	49
884	946452	946501	946551	946600	946649	49
885	946943	946992	947041	947090	947140	49
886	947434	947483	947532	947581	947630	49
887	947924	947973	948022	948070	948119	49
888	948413	948462	948511	948560	948609	49
889	948902	948951	948999	949048	949097	49
890	949390	949439	949488	949536	949585	49
891	949878	949926	949975	950024	950073	49
892	950365	950414	950462	950511	950560	49
893	950851	950900	950949	950997	951046	49
894	951338	951386	951435	951483	951532	49
895	951823	951872	951920	951969	952017	48
896	952308	952356	952405	952453	952502	48
897	952792	952841	952889	952938	952986	48
898	953276	953325	953373	953421	953470	48
899	953760	953808	953856	953905	953953	48

No.	5	6	7	8	9	Diff.
850	929674	929725	929776	929827	929879	51
851	930185	930236	930287	930338	930389	51
852	930694	930745	930796	930847	930898	51
853	931204	931254	931305	931356	931407	51
854	931712	931763	931814	931865	931915	51
855	932220	932271	932322	932372	932423	51
856	932727	932778	932829	932879	932930	51
857	933234	933285	933335	933386	933437	51
858	933740	933791	933841	933892	933943	51
859	934246	934296	934347	934397	934448	51
860	934751	934801	934852	934902	934953	50
861	935255	935306	935356	935406	935457	50
862	935759	935809	935860	935910	935960	50
863	936262	936313	936363	936413	936463	50
864	936765	936815	936865	936916	936966	50
865	937267	937317	937367	937418	937468	50
866	937769	937819	937869	937919	937969	50
867	938269	938320	938370	938420	938470	50
868	938770	938820	938870	938920	938970	50
869	939270	939320	939369	939419	939469	50
870	939769	939819	939869	939918	939968	50
871	940267	940317	940367	940417	940467	50
872	940765	940815	940865	940915	940964	50
873	941263	941313	941362	941412	941462	50
874	941760	941809	941859	941909	941958	50
875	942256	942306	942355	942405	942455	50
876	942752	942801	942851	942901	942950	50
877	943247	943297	943346	943396	943445	49
878	943742	943791	943841	943890	943939	49
879	944236	944285	944335	944384	944433	49
880	944729	944779	944828	944877	944927	49
881	945222	945272	945321	945370	945419	49
882	945715	945764	945813	945862	945912	49
883	946207	946256	946305	946354	946403	49
884	946698	946747	946796	946845	946894	49
885	947189	947238	947287 ·	947336	947385	49
886	947679	947728	947777	947826	947875	49
887	948168	948217	948266	948315	948364	49
888	948657	948706	948755	948804	948853	49
889	949146	949195	949244	949292	949341	49
890	949634	949683	949731	949780	949829	49
891	950121	950170	950219	950267	950316	49
892	950608	950657	950706	950754	950803	49
893	951095	951143	951192	951240	951289	49
894	951580	951629	951677	951726	951775	49
895	952066	952114	952163	952211	952260	48
896	952550	952599	952647	952696	952744	48
897	953034	953083	953131	953180	953228	48
898	953518	953566	953615	953663	953711	48
899	954001	954049	954098	954146	954194	48

Log. 954. No. 900.

No.	0	1	2	3	4	Diff.
900	954243	954291	954339	954387	954435	48
901	954725	954773	954821	954869	954918	48
902	955207	955255	955303	955351	955399	48
903	955688	955736	955784	955832	955880	48
904	956168	956216	956265	956313	956361	48
905	956649	956697	956745	956793	956840	48
906	957128	957176	957224	957272	957320	48
907	957607	957655	957703	957751	957799	48
908	958086	958134	958181	958229	958277	48
909	958564	958612	958659	958707	958755	48
910	959041	959089	959137	959185	959232	48
911	959518	959566	959614	959661	959709	48
912	959995	960042	960090	960138	960185	48
913	960471	960518	960566	960613	960661	48
914	960946	960994	961041	961089	961136	47
915	961421	961469	961516	961563	961611	47
916	961895	961943	961990	962038	962085	47
917	962369	962417	962464	962511	962559	47
918	962843	962890	962937	962985	963032	47
919	963316	963363	963410	963457	963504	47
920	963788	963835	963882	963929	963977	47
921	964260	964307	964354	964401	964448	47
922	964731	964778	964825	964872	964919	47
923	965202	965249	965296	965343	965390	47
924	965672	965719	965766	965813	965860	47
925	966142	966189	966236	966283	966329	47
926	966611	966658	966705	966752	966799	47
927	967080	967127	967173	967220	967267	47
928	967548	967595	967642	967688	967735	47
929	968016	968062	968109	968156	968203	47
930	968483	968530	968576	968623	968670	47
931	968950	968996	969043	969090	969136	47
932	969416	969463	969509	969556	969602	47
933	969882	969928	969975	970021	970068	47
934	970347	970393	970440	970486	970533	46
935	970812	970858	970904	970951	970997	46
936	971276	971322	971369	971415	971461	46
937	971740	971786	971832	971879	971925	46
938	972203	972249	972295	972342	972388	46
939	972666	972712	972758	972804	972851	46
940	973128	973174	973220	973266	973313	46
941	973590	973636	973682	973728	973774	46
942	974051	974097	974143	974189	974235	46
943	974512	974558	974604	974650	974696	46
944	974972	975018	975064	975110	975156	46
945	975432	975478	975524	975570	975616	46
946	975891	975937	975983	976029	976075	46
947	976350	976396	976442	976488	976533	46
948	976808	976854	976900	976946	976992	46
949	977266	977312	977358	977403	977449	46

Log. 977. No. 949.

No.	5	6	7	8	9	Diff.
900	954484	954532	954580	954628	954677	48
901	954966	955014	955062	955110	955158	48
902	955447	955495	955543	955592	955640	48
903	955928	955976	956024	956072	956120	48
904	956409	956457	956505	956553	956601	48
905	956888	956936	956984	957032	957080	48
906	957368	957416	957464	957512	957559	48
907	957847	957894	957942	957990	958038	48
908	958325	958373	958421	958468	958516	48
909	958803	958850	958898	958946	958994	48
910	959280	959328	959375	959423	959471	48
911	959757	959804	959852	959900	959947	48
912	960233	960280	960328	960376	960423	48
913	960709	960756	960804	960851	960899	48
914	961184	961231	961279	961326	961374	47
915	961658	961706	961753	961801	961848	47
916	962132	962180	962227	962275	962322	47
917	962606	962653	962701	962748	962795	47
918	963079	963126	963174	963221	963268	47
919	963552	963599	963646	963693	963741	47
920	964024	964071	964118	964165	964212	47
921	964495	964542	964590	964637	964684	47
922	964966	965013	965061	965108	965155	47
923	965437	965484	965531	965578	965625	47
924	965907	965954	966001	966048	966095	47
925	966376	966423	966470	966517	966564	47
926	966845	966892	966939	966986	967033	47
927	967314	967361	967408	967454	967501	47
928	967782	967829	967875	967922	967969	47
929	968249	968296	968343	968390	968436	47
930	968716	968763	968810	968856	968903	47
931	969183	969229	969276	969323	969369	47
932	969649	969695	969742	969789	969835	47
933	970114	970161	970207	970254	970300	47
934	970579	970626	970672	970719	970765	46
935	971044	971090	971137	971183	971229	46
936	971508	971554	971601	971647	971693	46
937	971971	972018	972064	972110	972157	46
938	972434	972481	972527	972573	972619	46
939	972897	972943	972989	973035	973082	46
940	973359	973405	973451	973497	973543	46
941	973820	973866	973913	973959	974005	46
942	974281	974327	974374	974420	974466	46
943	974742	974788	974834	974880	974926	46
944	975202	975248	975294	975340	975386	46
945	975662	975707	975753	975799	975845	46
946	976121	976167	976212	976258	976304	46
947	976579	976625	976671	976717	976763	46
948	977037	977083	977129	977175	977220	46
949	977495	977541	977586	977632	977678	46

Log. 977. No. 950.

No.	0	1	2	3	4	Diff.
950	977724	977769	977815	977861	977906	46
951	978181	978226	978272	978317	978363	46
952	978637	978683	978728	978774	978819	46
953	979093	979138	979184	979230	979275	46
954	979548	979594	979639	979685	979730	46
955	980003	980049	980094	980140	980185	45
956	980458	980503	980549	980594	980640	45
957	980912	980957	981003	981048	981093	45
958	981366	981411	981456	981501	981547	45
959	981819	981864	981909	981954	982000	45
960	982271	982316	982362	982407	982452	45
961	982723	982769	982814	982859	982904	45
962	983175	983220	983265	983310	983356	45
963	983626	983671	983716	983762	983807	45
964	984077	984122	984167	984212	984257	45
965	984527	984572	984617	984662	984707	45
966	984977	985022	985067	985112	985157	45
967	985426	985471	985516	985561	985606	45
968	985875	985920	985965	986010	986055	45
969	986324	986369	986413	986458	986503	45
970	986772	986817	986861	986906	986951	45
971	987219	987264	987309	987353	987398	45
972	987666	987711	987756	987800	987845	45
973	988113	988157	988202	988247	988291	45
974	988559	988604	988648	988693	988737	45
975	989005	989049	989094	989138	989183	45
976	989450	989494	989539	989583	989628	44
977	989895	989939	989983	990028	990072	44
978	990339	990383	990428	990472	990516	44
979	990783	990827	990871	990916	990960	44
980	991226	991270	991315	991359	991403	44
981	991669	991713	991758	991802	991846	44
982	992111	992156	992200	992244	992288	44
983	992554	992598	992642	992686	992730	44
984	992995	993039	993083	993127	993172	44
985	993436	993480	993524	993568	993613	44
986	993877	993921	993965	994009	994053	44
987	994317	994361	994405	994449	994493	44
988	994757	994801	994845	994889	994933	44
989	995196	995240	995284	995328	995372	44
990	995635	995679	995723	995767	995811	44
991	996074	996117	996161	996205	996249	44
992	996512	996555	996599	996643	996687	44
993	996949	996993	997037	997080	997124	44
994	997386	997430	997474	997517	997561	44
995	997823	997867	997910	997954	997998	44
996	998259	998303	998347	998390	998434	44
997	998695	998739	998782	998826	998869	44
998	999131	999174	999218	999261	999305	44
999	999565	999609	999652	999696	999739	43

Log. 999. No. 999.

No.	5	6	7	8	9	Diff.
950	977952	977998	978043	978089	978135	46
951	978409	978454	978500	978546	978591	46
952	978865	978911	978956	979002	979047	46
953	979321	979366	979412	979457	979503	46
954	979776	979821	979867	979912	979958	46
955	980231	980276	980322	980367	980412	45
956	980685	980730	980776	980821	980867	45
957	981139	981184	981229	981275	981320	45
958	981592	981637	981683	981728	981773	45
959	982045	982090	982135	982181	982226	45
960	982497	982543	982588	982633	982678	45
961	982949	982994	983040	983085	983130	45
962	983401	983446	983491	983536	983581	45
963	983852	983897	983942	983987	984032	45
964	984302	984347	984392	984437	984482	45
965	984752	984797	984842	984887	984932	45
966	985202	985247	985292	985337	985382	45
967	985651	985696	985741	985786	985830	45
968	986100	986144	986189	986234	986279	45
969	986548	986593	986637	986682	986727	45
970	986996	987040	987085	987130	987175	45
971	987443	987488	987532	987577	987622	45
972	987890	987934	987979	988024	988068	45
973	988336	988381	988425	988470	988514	45
974	988782	988826	988871	988916	988960	45
975	989227	989272	989316	989361	989405	45
976	989672	989717	989761	989806	989850	44
977	990117	990161	990206	990250	990294	44
978	990561	990605	990650	990694	990738	44
979	991004	991049	991093	991137	991182	44
980	991448	991492	991536	991580	991625	44
981	991890	991935	991979	992023	992067	44
982	992333	992377	992421	992465	992509	44
983	992774	992819	992863	992907	992951	44
984	993216	993260	993304	993348	993392	44
985	993657	993701	993745	993789	993833	44
986	994097	994141	994185	994229	994273	44
987	994537	994581	994625	994669	994713	44
988	994977	995021	995065	995108	995152	44
989	995416	995460	995504	995547	995591	44
990	995854	995898	995942	995986	996030	44
991	996293	996337	996380	996424	996468	44
992	996731	996774	996818	996862	996906	44
993	997168	997212	997255	997299	997343	44
994	997605	997648	997692	997736	997779	44
995	998041	998085	998129	998172	998216	44
996	998477	998521	998564	998608	998652	44
997	998913	998956	999000	999043	999087	44
998	999348	999392	999435	999479	999522	44
999	999783	999826	999870	999913	999957	43

LOGARITHMS OF NUMBERS

No.	Log.	No.	Log.	No.	Log.	No.	Log.
1	000000	51	707570	101	004321	151	178977
2	301030	52	716003	102	008600	152	181844
3	477121	53	724276	103	012837	153	184691
4	602060	54	732394	104	017033	154	187521
5	698970	55	740363	105	021189	155	190332
6	778151	56	748188	106	025306	156	193125
7	845098	57	755875	107	029384	157	195900
8	903090	58	763428	108	033424	158	198657
9	954243	59	770852	109	037426	159	201397
10	000000	60	778151	110	041393	160	204120
11	041393	61	785330	111	045323	161	206826
12	079181	62	792392	112	049218	162	209515
13	113943	63	799341	113	053078	163	212188
14	146128	64	806180	114	056905	164	214844
15	176091	65	812913	115	060698	165	217484
16	204120	66	819544	116	064458	166	220108
17	230449	67	826075	117	068186	167	222716
18	255273	68	832509	118	071882	168	225309
19	278754	69	838849	119	075547	169	227887
20	301030	70	845098	120	079181	170	230449
21	322219	71	851258	121	082785	171	232996
22	342423	72	857333	122	086360	172	235528
23	361728	73	863323	123	089905	173	238046
24	380211	74	869232	124	093422	174	240549
25	397940	75	875061	125	096910	175	243038
26	414973	76	880814	126	100371	176	245513
27	431364	77	886491	127	103804	177	247973
28	447158	78	892095	128	107210	178	250420
29	462398	79	897627	129	110590	179	252853
30	477121	80	903090	130	113943	180	255273
31	491362	81	908485	131	117271	181	257679
32	505150	82	913814	132	120574	182	260071
33	518514	83	919078	133	123852	183	262451
34	531479	84	924279	134	127105	184	264818
35	544068	85	929419	135	130334	185	267172
36	556303	86	934498	136	133539	186	269513
37	568202	87	939519	137	136721	187	271842
38	579784	88	944483	138	139879	188	274158
39	591065	89	949390	139	143015	189	276462
40	602060	90	954243	140	146128	190	278754
41	612784	91	959041	141	149219	191	281033
42	623249	92	963788	142	152288	192	283301
43	633468	93	968483	143	155336	193	285557
44	643453	94	973128	144	158362	194	287802
45	653213	95	977724	145	161368	195	290035
46	662758	96	982271	146	164353	196	292256
47	672098	97	986772	147	167317	197	294466
48	681241	98	991226	148	170262	198	296665
49	690196	99	995635	149	173186	199	298853
50	698970	100	000000	150	176091	200	301030

For explanation see pp. 207-215

LOGARITHMIC TABLES

OF

COMPOUND INTEREST AND ANNUITIES

BY

FÉDOR THOMAN

TABLE I.

SHOWING

(A) The Logarithms of the Amount of £1 at the end of any number of years from 1 to 100 years.

Log r^n.

(B) The Logarithms of the Annuity £a per annum which £1 will purchase for any number of years from 1 to 100 years.

Log a^n.

In the notation used in the explanation on pages 216–228, the symbol $(1+i)^n$ is employed instead of M. Thoman's symbol r^n, and $\dfrac{1}{a_{\overline{n}|}}$ instead of his symbol a^n.

Q

Table 1. Shewing: 1st Logarithm of the amount of £1. at the end of any number of years. $\frac{1}{2}$ 2nd the Logarithm of the annuity £a. per annum which £1. will purchase for any number of years.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00216·61	0,00216·61	8,34757·77	0,11046·91	51
2	0,00433·21	9,70221·77	8,34018·12	0,11263·52	52
3	0,00649·82	9,52720·73	8,33294·45	0,11480·13	53
4	0,00866·42	9,40334·84	8,32586·16	0,11696·73	54
5	0,01083·03	9,30751·74	8,31892·67	0,11913·34	55
6	0,01299·64	9,22941·43	8,31213·45	0,12129·95	56
7	0,01516·24	9,16354·47	8,30547·99	0,12346·55	57
8	0,01732·85	9,10662·90	8,29895·81	0,12563·16	58
9	0,01949·46	9,05655·18	8,29256·45	0,12779·76	59
10	0,02166·06	9,01186·88	8,28629·48	0,12996·37	60
11	0,02382·67	8,97154·97	8,28014·49	0,13212·98	61
12	0,02599·27	8,93483·38	8,27411·08	0,13429·58	62
13	0,02815·88	8,90114·35	8,26818·87	0,13646·19	63
14	0,03032·49	8,87002·97	8,26237·52	0,13862·80	64
15	0,03249·09	8,84113·64	8,25666·70	0,14079·40	65
16	0,03465·70	8,81417·67	8,25106·05	0,14296·01	66
17	0,03682·30	8,78891·61	8,24555·30	0,14512·61	67
18	0,03898·91	8,76515·97	8,24014·12	0,14729·22	68
19	0,04115·52	8,74274·50	8,23482·25	0,14945·83	69
20	0,04332·12	8,72153·41	8,22959·42	0,15162·43	70
21	0,04548·73	8,70140·94	8,22445·35	0,15379·04	71
22	0,04765·34	8,68226·97	8,21939·82	0,15595·64	72
23	0,04981·94	8,66402·73	8,21442·58	0,15812·25	73
24	0,05198·55	8,64660·57	8,20953·39	0,16028·86	74
25	0,05415·15	8,62993·79	8,20472·05	0,16245·46	75
26	0,05631·76	8,61396·47	8,19998·33	0,16462·07	76
27	0,05848·37	8,59863·34	8,19532·05	0,16678·68	77
28	0,06064·97	8,58389·75	8,19073·01	0,16895·28	78
29	0,06281·58	8,56971·49	8,18621·02	0,17111·89	79
30	0,06498·19	8,55604·81	8,18175·89	0,17328·49	80
31	0,06714·79	8,54286·33	8,17737·46	0,17545·10	81
32	0,06931·40	8,53012·96	8,17305·56	0,17761·71	82
33	0,07148·00	8,51781·95	8,16880·04	0,17978·31	83
34	0,07364·61	8,50590·74	8,16460·73	0,18194·92	84
35	0,07581·22	8,49437·03	8,16047·48	0,18411·52	85
36	0,07797·82	8,48318·69	8,15640·16	0,18628·13	86
37	0,08014·43	8,47233·78	8,15238·61	0,18844·74	87
38	0,08231·03	8,46180·52	8,14842·72	0,19061·34	88
39	0,08447·64	8,45157·26	8,14452·35	0,19277·95	89
40	0,08664·25	8,44162·47	8,14067·37	0,19494·56	90
41	0,08880·85	8,43194·75	8,13687·67	0,19711·16	91
42	0,09097·46	8,42252·77	8,13313·12	0,19927·77	92
43	0,09314·07	8,41335·33	8,12943·61	0,20144·37	93
44	0,09530·67	8,40441·31	8,12579·04	0,20360·98	94
45	0,09747·28	8,39569·62	8,12219·29	0,20577·59	95
46	0,09963·88	8,38719·30	8,11864·27	0,20794·19	96
47	0,10180·49	8,37889·42	8,11513·86	0,21010·80	97
48	0,10397·10	8,37079·11	8,11167·99	0,21227·41	98
49	0,10613·70	8,36287·57	8,10826·55	0,21444·01	99
50	0,10830·31	8,35514·03	8,10489·45	0,21660·62	100
			7,69897·00		Perp

Q 2

1 Per Cent.

Years	Log. rⁿ.	Log. aⁿ.	Log. aⁿ.	Log. rⁿ.	Years
1	0,00432·14	0,00432·14	8,40013·73	0,22039·01	51
2	0,00864·27	9,70544·67	8,39368·10	0,22471·14	52
3	0,01296·41	9,53150·71	8,38738·20	0,22903·28	53
4	0,01728·55	9,40871·66	8,38123·39	0,23335·42	54
5	0,02160·69	9,31395·11	8,37523·13	0,23767·56	55
6	0,02592·82	9,23691·09	8,36936·88	0,24199·69	56
7	0,03024·96	9,17210·14	8,36364·13	0,24631·83	57
8	0,03457·10	9,11624·34	8,35804·40	0,25063·97	58
9	0,03889·24	9,06722·10	8,35257·23	0,25496·11	59
10	0,04321·37	9,02359·02	8,34722·17	0,25928·24	60
11	0,04753·51	8,98432·06	8,34198·82	0,26360·38	61
12	0,05185·65	8,94865·15	8,33686·80	0,26792·52	62
13	0,05617·79	8,91600·53	8,33185·73	0,27224·65	63
14	0,06049·92	8,88593·30	8,32695·27	0,27656·79	64
15	0,06482·06	8,85807·85	8,32215·04	0,28088·93	65
16	0,06914·20	8,83215·49	8,31744·74	0,28521·07	66
17	0,07346·34	8,80792·76	8,31284·06	0,28953·20	67
18	0,07778·47	8,78520·21	8,30832·70	0,29385·34	68
19	0,08210·61	8,76381·54	8,30390·41	0,29817·48	69
20	0,08642·75	8,74362·98	8,29956·87	0,30249·62	70
21	0,09074·88	8,72452·77	8,29531·85	0,30681·75	71
22	0,09507·02	8,70640·81	8,29115·10	0,31113·89	72
23	0,09939·16	8,68918·31	8,28706·38	0,31546·03	73
24	0,10371·30	8,67277·62	8,28305·45	0,31978·17	74
25	0,10803·43	8,65712·04	8,27912·12	0,32410·30	75
26	0,11235·57	8,64215·65	8,27526·16	0,32842·44	76
27	0,11667·71	8,62783·20	8,27147·36	0,33274·58	77
28	0,12099·85	8,61410·00	8,26775·54	0,33706·72	78
29	0,12531·98	8,60091·87	8,26410·51	0,34138·85	79
30	0,12964·12	8,58825·06	8,26052·10	0,34570·99	80
31	0,13396·26	8,57606·17	8,25700·14	0,35003·13	81
32	0,13828·40	8,56432·14	8,25354·42	0,35435·27	82
33	0,14260·53	8,55300·19	8,25014·80	0,35867·40	83
34	0,14692·67	8,54207·78	8,24681·18	0,36299·54	84
35	0,15124·81	8,53152·59	8,24353·36	0,36731·68	85
36	0,15556·95	8,52132·52	8,24031·21	0,37163·81	86
37	0,15989·08	8,51145·62	8,23714·56	0,37595·95	87
38	0,16421·22	8,50190·10	8,23403·34	0,38028·09	88
39	0,16853·36	8,49264·30	8,23097·39	0,38460·23	89
40	0,17285·50	8,48366·72	8,22796·52	0,38892·36	90
41	0,17717·63	8,47495·92	8,22500·72	0,39324·50	91
42	0,18149·77	8,46650·62	8,22209·81	0,39756·64	92
43	0,18581·91	8,45829·59	8,21923·68	0,40188·78	93
44	0,19014·04	8,45031·70	8,21642·22	0,40620·91	94
45	0,19446·18	8,44255·89	8,21365·35	0,41053·05	95
46	0,19878·32	8,43501·17	8,21092·93	0,41485·19	96
47	0,20310·46	8,42766·63	8,20824·89	0,41917·33	97
48	0,20742·59	8,42051·42	8,20561·12	0,42349·46	98
49	0,21174·73	8,41354·69	8,20301·53	0,42781·60	99
50	0,21606·87	8,40675·69	8,20046·04	0,43213·74	100
			8,00000·00		Perp

$1\frac{1}{2}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00646·60	0,00646·60	8,45016·73	0,32976·82	51
2	0,01293·21	9,70865·71	8,44455·80	0,33623·42	52
3	0,01939·81	9,53577·87	8,43910·15	0,34270·02	53
4	0,02586·42	9,41404·49	8,43379·19	0,34916·63	54
5	0,03233·02	9,32033·19	8,42862·34	0,35563·23	55
6	0,03879·63	9,24433·95	8,42359·09	0,36209·84	56
7	0,04526·23	9,18057·36	8,41868·90	0,36856·44	57
8	0,05172·83	9,12575·45	8,41391·32	0,37503·04	58
9	0,05819·44	9,07776·69	8,40925·87	0,38149·65	59
10	0,06466·04	9,03516·62	8,40472·13	0,38796·25	60
11	0,07112·65	8,99692·23	8,40029·69	0,39442·86	61
12	0,07759·25	8,96227·45	8,39598·15	0,40089·46	62
13	0,08405·85	8,93064·52	8,39177·13	0,40736·07	63
14	0,09052·46	8,90158·54	8,38766·27	0,41382·67	64
15	0,09699·06	8,87473·89	8,38365·27	0,42029·27	65
16	0,10345·67	8,84981·90	8,37973·78	0,42675·88	66
17	0,10992·27	8,82659·08	8,37591·50	0,43322·48	67
18	0,11638·88	8,80486·00	8,37218·13	0,43969·09	68
19	0,12285·48	8,78446·37	8,36853·40	0,44615·69	69
20	0,12932·08	8,76526·42	8,36497·01	0,45262·30	70
21	0,13578·69	8,74714·37	8,36148·74	0,45908·90	71
22	0,14225·29	8,73000·10	8,35808·32	0,46555·50	72
23	0,14871·90	8,71374·88	8,35475·53	0,47202·11	73
24	0,15518·50	8,69831·03	8,35150·12	0,47848·71	74
25	0,16165·11	8,68361·84	8,34831·89	0,48495·32	75
26	0,16811·71	8,66961·41	8,34520·62	0,49141·92	76
27	0,17458·31	8,65624·46	8,34216·13	0,49788·52	77
28	0,18104·92	8,64346·33	8,33918·21	0,50435·13	78
29	0,18751·52	8,63122·84	8,33626·68	0,51081·73	79
30	0,19398·13	8,61950·22	8,33341·34	0,51728·34	80
31	0,20044·73	8,60825·10	8,33062·05	0,52374·94	81
32	0,20691·34	8,59744·40	8,32788·65	0,53021·55	82
33	0,21337·94	8,58705·33	8,32520·95	0,53668·15	83
34	0,21984·54	8,57705·37	8,32258·81	0,54314·75	84
35	0,22631·15	8,56742·20	8,32002·07	0,54961·36	85
36	0,23277·75	8,55813·71	8,31750·61	0,55607·96	86
37	0,23924·36	8,54917·95	8,31504·28	0,56254·57	87
38	0,24570·96	8,54053·14	8,31262·96	0,56901·17	88
39	0,25217·56	8,53217·62	8,31026·49	0,57547·78	89
40	0,25864·17	8,52409·87	8,30794·79	0,58194·38	90
41	0,26510·77	8,51628·49	8,30567·71	0,58840·98	91
42	0,27157·38	8,50872·18	8,30345·14	0,59487·59	92
43	0,27803·98	8,50139·68	8,30126·97	0,60134·19	93
44	0,28450·59	8,49429·90	8,29913·08	0,60780·80	94
45	0,29097·19	8,48741·78	8,29703·39	0,61427·40	95
46	0,29743·79	8,48074·32	8,29497·78	0,62074·01	96
47	0,30390·40	8,47426·61	8,29296·14	0,62720·61	97
48	0,31037·00	8,46797·79	8,29098·41	0,63367·21	98
49	0,31683·61	8,46187·03	8,28904·46	0,64013·82	99
50	0,32330·21	8,45593·57	8,28714·24	0,64660·42	100
			8,17609·13		Perp.

1 $\frac{5}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00700·06	0,00700·06	8,46228·76	0,35702·85	51
2	0,01400·11	9,70945·67	8,45687·59	0,36402·90	52
3	0,02100·17	9,53684·22	8,45161·58	0,37102·96	53
4	0,02800·22	9,41537·09	8,44650·12	0,37803·02	54
5	0,03500·28	9,32191·89	8,44152·64	0,38503·07	55
6	0,04200·34	9,24618·62	8,43668·64	0,39203·13	56
7	0,04900·39	9,18267·86	8,43197·57	0,39903·18	57
8	0,05600·45	9,12811·63	8,42738·97	0,40603·24	58
9	0,06300·50	9,08038·42	8,42292·39	0,41303·30	59
10	0,07000·56	9,03803·76	8,41857·38	0,42003·35	60
11	0,07700·61	9,00004·66	8,41433·55	0,42703·41	61
12	0,08400·67	8,96565·02	8,41020·47	0,43403·46	62
13	0,09100·73	8,93427·09	8,40617·81	0,44103·52	63
14	0,09800·78	8,90545·97	8,40225·20	0,44803·58	64
15	0,10500·84	8,87886·05	8,39842·30	0,45503·63	65
16	0,11200·89	8,85418·64	8,39468·79	0,46203·69	66
17	0,11900·95	8,83120·29	8,39104·37	0,46903·74	67
18	0,12601·01	8,80971·52	8,38748·73	0,47603·80	68
19	0,13301·06	8,78956·07	8,38401·59	0,48303·85	69
20	0,14001·12	8,77060·16	8,38062·69	0,49003·91	70
21	0,14701·17	8,75272·00	8,37731·79	0,49703·97	71
22	0,15401·23	8,73581·51	8,37408·61	0,50404·02	72
23	0,16101·28	8,71979·91	8,37092·93	0,51104·08	73
24	0,16801·34	8,70459·55	8,36784·51	0,51804·13	74
25	0,17501·40	8,69013·73	8,36483·15	0,52504·19	75
26	0,18201·45	8,67636·51	8,36188·64	0,53204·25	76
27	0,18901·51	8,66322·65	8,35900·78	0,53904·30	77
28	0,19601·56	8,65067·47	8,35619·36	0,54604·36	78
29	0,20301·62	8,63866·80	8,35344·23	0,55304·41	79
30	0,21001·68	8,62716·86	8,35075·18	0,56004·47	80
31	0,21701·73	8,61614·29	8,34812·05	0,56704·52	81
32	0,22401·79	8,60555·99	8,34554·67	0,57404·58	82
33	0,23101·84	8,59539·20	8,34302·89	0,58104·64	83
34	0,23801·90	8,58561·38	8,34056·55	0,58804·69	84
35	0,24501·96	8,57620·21	8,33815·50	0,59504·75	85
36	0,25202·01	8,56713·59	8,33579·60	0,60204·80	86
37	0,25902·07	8,55839·57	8,33348·74	0,60904·86	87
38	0,26602·12	8,54996·37	8,33122·74	0,61604·92	88
39	0,27302·18	8,54182·32	8,32901·50	0,62304·97	89
40	0,28002·23	8,53395·91	8,32648·89	0,63005·03	90
41	0,28702·29	8,52635·74	8,32472·80	0,63705·08	91
42	0,29402·35	8,51900·48	8,32265·12	0,64405·14	92
43	0,30102·40	8,51188·94	8,32061·72	0,65105·19	93
44	0,30802·46	8,50499·97	8,31862·48	0,65805·25	94
45	0,31502·51	8,49832·51	8,31667·34	0,66505·31	95
46	0,32202·57	8,49185·59	8,31476·15	0,67205·36	96
47	0,32902·63	8,48558·30	8,31288·83	0,67905·42	97
48	0,33602·68	8,47949·75	8,31105·32	0,68605·47	98
49	0,34302·74	8,47359·15	8,30925·47	0,69305·53	99
50	0,35002·79	8,46785·72	8,30749·23	0,70005·59	100
			8,21085·34		Perp.

$1\frac{3}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00753·44	0,00753·44	8,47425·55	0,38425·53	51
2	0,01506·88	9,71025·53	8,46903·59	0,39178·97	52
3	0,02260·33	9,53790·40	8,46396·64	0,39932·41	53
4	0,03013·77	9,41669·43	8,45904·12	0,40685·86	54
5	0,03767·21	9,32350·26	8,45425·46	0,41439·30	55
6	0,04520·65	9,24802·86	8,44960·11	0,42192·74	56
7	0,05274·09	9,18477·83	8,44507·55	0,42946·18	57
8	0,06027·53	9,13047·18	8,44067·34	0,43699·62	58
9	0,06780·98	9,08299·40	8,43639·01	0,44453·07	59
10	0,07534·42	9,04090·03	8,43222·12	0,45206·51	60
11	0,08287·86	9,00316·04	8,42816·25	0,45959·95	61
12	0,09041·30	8,96901·39	8,42421·04	0,46713·39	62
13	0,09794·74	8,93788·29	8,42036·10	0,47466·83	63
14	0,10548·19	8,90931·86	8,41661·07	0,48220·27	64
15	0,11301·63	8,88296·48	8,41295·62	0,48973·72	65
16	0,12055·07	8,85853·47	8,40939·42	0,49727·16	66
17	0,12808·51	8,83579·35	8,40592·18	0,50480·60	67
18	0,13561·95	8,81454·67	8,40253·58	0,51234·04	68
19	0,14315·39	8,79463·17	8,39923·37	0,51987·48	69
20	0,15068·84	8,77591·04	8,39601·25	0,52740·93	70
21	0,15822·28	8,75826·56	8,39287·02	0,53494·37	71
22	0,16575·72	8,74159·57	8,38980·37	0,54247·81	72
23	0,17329·16	8,72581·33	8,38681·08	0,55001·25	73
24	0,18082·60	8,71084·18	8,38388·95	0,55754·69	74
25	0,18836·04	8,69661·43	8,38103·74	0,56508·13	75
26	0,19589·49	8,68307·13	8,37825·25	0,57261·58	76
27	0,20342·93	8,67016·03	8,37553·26	0,58015·02	77
28	0,21096·37	8,65783·49	8,37287·63	0,58768·46	78
29	0,21849·81	8,64605·30	8,37028·14	0,59521·90	79
30	0,22603·25	8,63477·7c	8,36774·59	0,60275·34	80
31	0,23356·70	8,62397·31	8,36526·83	0,61028·78	81
32	0,24110·14	8,61361·06	8,36284·73	0,61782·23	82
33	0,24863·58	8,60366·17	8,36048·09	0,62535·67	83
34	0,25617·02	8,59410·10	8,35816·78	0,63289·11	84
35	0,26370·46	8,58490·54	8,35590·03	0,64042·55	85
36	0,27123·90	8,57605·41	8,35369·49	0,64795·99	86
37	0,27877·35	8,56752·71	8,35153·28	0,65549·44	87
38	0,28630·79	8,55930·68	8,34941·82	0,66302·88	88
39	0,29384·23	8,55137·67	8,34734·99	0,67056·32	89
40	0,30137·67	8,54372·16	8,34532·67	0,67809·76	90
41	0,30891·11	8,53632·73	8,34334·75	0,68563·20	91
42	0,31644·56	8,52918·09	8,34141·12	0,69316·64	92
43	0,32398·00	8,52227·03	8,33951·65	0,70070·09	93
44	0,33151·44	8,51558·38	8,33766·23	0,70823·53	94
45	0,33904·88	8,50911·12	8,33584·77	0,71576·97	95
46	0,34658·32	8,50284·25	8,33407·18	0,72330·41	96
47	0,35411·76	8,49676·86	8,33233·34	0,73083·85	97
48	0,36165·21	8,49088·08	8,33063·19	0,73837·30	98
49	0,36918·65	8,48517·10	8,32896·56	0,74590·74	99
50	0,37672·09	8,47963·16	8,32733·42	0,75344·18	100
			8,24303·80		Perp

$1\frac{7}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00806·76	0,00806·76	8,48607·21	0,41144·87	51
2	0,01613·52	9,71105·27	8,48103·92	0,41951·63	52
3	0,02420·29	9,53896·40	8,47615·50	0,42758·40	53
4	0,03227·05	9,41801·54	8,47141·35	0,43565·16	54
5	0,04033·81	9,32508·31	8,46680·90	0,44371·92	55
6	0,04840·57	9,24986·69	8,46233·64	0,45178·68	56
7	0,05647·34	9,18687·27	8,45799·04	0,45985·44	57
8	0,06454·10	9,13282·10	8,45376·62	0,46792·21	58
9	0,07260·86	9,08559·62	8,44965·94	0,47598·97	59
10	0,08067·62	9,04375·38	8,44566·57	0,48405·73	60
11	0,08874·38	9,00626·40	8,44178·08	0,49212·49	61
12	0,09681·15	8,97236·58	8,43800·08	0,50019·25	62
13	0,10487·91	8,94148·14	8,43432·22	0,50826·02	63
14	0,11294·67	8,91316·21	8,43074·13	0,51632·78	64
15	0,12101·43	8,88705·19	8,42725·47	0,52439·54	65
16	0,12908·19	8,86286·36	8,42385·95	0,53246·30	66
17	0,13714·96	8,84036·28	8,42055·23	0,54053·07	67
18	0,14521·72	8,81935·49	8,41733·03	0,54859·83	68
19	0,15328·48	8,79967·69	8,41419·08	0,55666·59	69
20	0,16135·24	8,78119·14	8,41113·08	0,56473·35	70
21	0,16942·01	8,76378·05	8,40814·80	0,57280·11	71
22	0,17748·77	8,74734·31	8,40524·00	0,58086·88	72
23	0,18555·53	8,73179·16	8,40240·42	0,58893·64	73
24	0,19362·29	8,71704·94	8,39963·85	0,59700·40	74
25	0,20169·05	8,70304·95	8,39694·07	0,60507·16	75
26	0,20975·82	8,68973·27	8,39430·88	0,61313·92	76
27	0,21782·58	8,67704·65	8,39174·08	0,62120·69	77
28	0,22589·34	8,66494·41	8,38923·47	0,62927·45	78
29	0,23396·10	8,65338·36	8,38678·87	0,63734·21	79
30	0,24202·87	8,64232·76	8,38440·11	0,64540·97	80
31	0,25009·63	8,63174·21	8,38207·02	0,65347·74	81
32	0,25816·39	8,62159·65	8,37979·41	0,66154·50	82
33	0,26623·15	8,61186·28	8,37757·16	0,66961·26	83
34	0,27429·91	8,60251·60	8,37540·09	0,67768·02	84
35	0,28236·68	8,59353·27	8,37328·06	0,68574·78	85
36	0,29043·44	8,58489·19	8,37120·95	0,69381·55	86
37	0,29850·20	8,57657·41	8,36918·60	0,70188·31	87
38	0,30656·96	8,56856·14	8,36720·89	0,70995·07	88
39	0,31463·72	8,56083·74	8,36527·70	0,71801·83	89
40	0,32270·49	8,55338·71	8,36338·88	0,72608·60	90
41	0,33077·25	8,54619·59	8,36154·34	0,73415·36	91
42	0,33884·01	8,53925·09	8,35973·95	0,74222·12	92
43	0,34690·77	8,53254·01	8,35797·61	0,75028·88	93
44	0,35497·54	8,52605·23	8,35625·21	0,75835·64	94
45	0,36304·30	8,51977·69	8,35456·66	0,76642·41	95
46	0,37111·06	8,51370·37	8,35291·82	0,77449·17	96
47	0,37917·82	8,50782·39	8,35130·63	0,78255·93	97
48	0,38724·58	8,50212·85	8,34972·98	0,79062·69	98
49	0,39531·35	8,49660·98	8,34818·80	0,79869·45	99
50	0,40338·11	8,49126·01	8,34667·98	0,80676·22	100
			8,27300·13		Perp.

2 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Year
1	0,00860·02	0,00860·02	8,49773·88	0,43860·88	51
2	0,01720·03	9,71184·90	8,49288·73	0,44720·89	52
3	0,02580·05	9,54002·23	8,48818·28	0,45580·91	53
4	0,03440·07	9,41933·40	8,48351·96	0,46440·93	54
5	0,04300·09	9,32666·02	8,47919·18	0,47300·94	55
6	0,05160·10	9,25170·10	8,47489·44	0,48160·96	56
7	0,06020·12	9,18896·21	8,47072·20	0,49020·98	57
8	0,06880·14	9,13516·38	8,46667·00	0,49881·00	58
9	0,07740·15	9,08819·08	8,46273·38	0,50741·01	59
10	0,08600·17	9,04659·87	8,45890·93	0,51601·03	60
11	0,09460·19	9,00935·71	8,45519·19	0,52461·05	61
12	0,10320·21	8,97570·56	8,45157·82	0,53321·07	62
13	0,11180·22	8,94506·63	8,44806·42	0,54181·08	63
14	0,12040·24	8,91699·05	8,44464·66	0,55041·10	64
15	0,12900·26	8,89112·17	8,44132·18	0,55901·12	65
16	0,13760·27	8,86717·35	8,43808·68	0,56761·13	66
17	0,14620·29	8,84491·09	8,43493·85	0,57621·15	67
18	0,15480·31	8,82413·95	8,43187·38	0,58481·17	68
19	0,16340·33	8,80469·66	8,42889·01	0,59341·19	69
20	0,17200·34	8,78644·42	8,42598·47	0,60201·20	70
21	0,18060·36	8,76926·48	8,42315·50	0,61061·22	71
22	0,18920·38	8,75305·73	8,42039·86	0,61921·24	72
23	0,19780·40	8,73773·40	8,41771·31	0,62781·25	73
24	0,20640·41	8,72321·83	8,41509·63	0,63641·27	74
25	0,21500·43	8,70944·33	8,41254·59	0,64501·29	75
26	0,22360·45	8,69634·97	8,41006·01	0,65361·31	76
27	0,23220·46	8,68388·50	8,40763·67	0,96221·32	77
28	0,24080·48	8,67200·24	8,40527·39	0,67081·34	78
29	0,24940·50	8,66066·02	8,40296·99	0,67941·36	79
30	0,25800·52	8,64982·07	8,40072·29	0,68801·37	80
31	0,26660·53	8,63945·01	8,39853·11	0,69661·39	81
32	0,27520·55	8,62951·77	8,39639·29	0,70521·41	82
33	0,28380·57	8,61999·58	8,39430·69	0,71381·43	83
34	0,29240·58	8,61085·89	8,39227·14	0,72241·44	84
35	0,30100·60	8,60208·40	8,39028·51	0,73101·46	85
36	0,30960·62	8,59364·99	8,38834·65	0,73961·48	86
37	0,31820·64	8,58553·72	8,38645·44	0,74821·49	87
38	0,32680·65	8,57772·80	8,38460·72	0,75681·51	88
39	0,33540·67	8,57020·59	8,38280·38	0,76541·53	89
40	0,34400·69	8,56295·56	8,38104·31	0,77401 55	90
41	0,35260·70	8,55596·32	8,37932·39	0,78261·56	91
42	0,36120·72	8,54921·53	8,37764·48	0,79121·58	92
43	0,36980·74	8,54270·02	8,37600·50	0,79981·60	93
44	0,37840·76	8,53640·61	8,37440·34	0,80841·61	94
45	0,38700·77	8,53032·30	8,37283·88	0,81701·63	95
46	0,39560·79	8,52444·06	8,37131·04	0,82561·65	96
47	0,40420·81	8,51874·97	8,36981·72	0,83421·67	97
48	0,41280·82	8,51324·20	8,36835·82	0,84281·68	98
49	0,42140·84	8,50790·93	8,36693·25	0,85141·70	99
50	0,43000·86	8,50274·40	8,36553·93	0,86001·72	100
			8,30103·00		Perp.

$2\frac{1}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00913·21	0,00913·21	8,50925·70	0,46573·55	51
2	0,01826·41	9,71264·41	8,50458·14	0,47486·76	52
3	0,02739·62	9,54107·89	8,50005·14	0,48399·97	53
4	0,03652·83	9,42065·01	8,49566·10	0,49313·18	54
5	0,04566·03	9,32823·42	8,49140·45	0,50226·38	55
6	0,05479·24	9,25353·10	8,48727·66	0,51139·59	56
7	0,06392·45	9,19104·63	8,48327·23	0,52052·80	57
8	0,07305·66	9,13750·04	8,47938·67	0,52966·00	58
9	0,08218·86	9,09077·79	8,47561·55	0,53879·21	59
10	0,09132·07	9,04943·46	8,47195·41	0,54792·42	60
11	0,10045·28	9,01244·01	8,46839·85	0,55705·62	61
12	0,10958·48	8,97903·37	8,46494·50	0,56618·83	62
13	0,11871·69	8,94863·78	8,46158·98	0,57532·04	63
14	0,12784·90	8,92080·35	8,45832·92	0,58445·24	64
15	0,13698·10	8,89517·46	8,45516·00	0,59358·45	65
16	0,14611·31	8,87146·43	8,45207·90	0,60271·66	66
17	0,15524·52	8,84943·79	8,44908·33	0,61184·87	67
18	0,16437·73	8,82890·09	8,44616·96	0,62098·07	68
19	0,17350·93	8,80969·06	8,44333·55	0,63011·28	69
20	0,18264·14	8,79166·90	8,44057·81	0,63924·49	70
21	0,19177·35	8,77471·88	8,43789·50	0,64837·69	71
22	0,20090·55	8,75873·85	8,43528·36	0,65750·90	72
23	0,21003·76	8,74364·08	8,43274·17	0,66664·11	73
24	0,21916·97	8,72934·89	8,43026·70	0,67577·31	74
25	0,22830·17	8,71579·57	8,42785·75	0,68490·52	75
26	0,23743·38	8,70292·24	8,42551·09	0,69403·73	76
27	0,24656·59	8,69067·61	8,42322·54	0,70316·94	77
28	0,25569·79	8,67901·02	8,42099·91	0,71230·14	78
29	0,26483·00	8,66788·30	8,41883·00	0,72143·35	79
30	0,27396·21	8,65725·67	8,41671·66	0,73056·56	80
31	0,28309·42	8,64709·75	8,41465·70	0,73969·76	81
32	0,29222·62	8,63737·48	8,41264·97	0,74882·97	82
33	0,30135·83	8,62806·09	8,41069·32	0,75796·18	83
34	0,31049·04	8,61913·02	8,40878·59	0,76709·38	84
35	0,31962·24	8,61056·00	8,40692·63	0,77622·59	85
36	0,32875·45	8,60232·86	8,40511·31	0,78535·80	86
37	0,33788·66	8,59441·70	8,40334·50	0,79449·00	87
38	0,34701·86	8,58680·73	8,40162·05	0,80362·21	88
39	0,35615·07	8,57948·28	8,39993·86	0,81275·42	89
40	0,36528·28	8,57242·85	8,39829·79	0,82188·63	90
41	0,37441·48	8,56563·03	8,39669·74	0,83101·83	91
42	0,38354·69	8,55907·50	8,39513·59	0,84015·04	92
43	0,39267·90	8,55275·08	8,39361·23	0,84928·25	93
44	0,40181·11	8,54664·60	8,39212·54	0,85841·45	94
45	0,41094·31	8,54075·03	8,39067·46	0,86754·66	95
46	0,42007·52	8,53505·38	8,38925·85	0,87667·87	96
47	0,42920·73	8,52954·74	8,38787·63	0,88581·07	97
48	0,43833·93	8,52422·22	8,38652·73	0,89494·28	98
49	0,44747·14	8,51907·05	8,38521·04	0,90407·49	99
50	0,45660·35	8,51408·44	8,38392·46	0,91320·70	100
			8,32735·89		Perp.

$2\frac{1}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,00966·33	0,00966·33	8,52062·79	0,49282·92	51
2	0,01932·66	9,71343·81	8,51612·32	0,50249·25	52
3	0,02899·00	9,54213·37	8,51176·23	0,51215·58	53
4	0,03865·33	9,42196·39	8,50753·94	0,52181·91	54
5	0,04831·66	9,32980·50	8,50344·87	0,53148·24	55
6	0,05797·99	9,25535·68	8,49948·50	0,54114·57	56
7	0,06764·32	9,19312·53	8,49564·32	0,55080·91	57
8	0,07730·65	9,13983·07	8,49191·85	0,56047·24	58
9	0,08696·99	9,09335·76	8,48830·64	0,57013·57	59
10	0,09663·32	9,05226·17	8,48480·26	0,57979·90	60
11	0,10629·65	9,01551·27	8,48140·31	0,58946·23	61
12	0,11595·98	8,98235·00	8,47810·38	0,59912·56	62
13	0,12562·31	8,95219·58	8,47490·13	0,60878·90	63
14	0,13528·64	8,92460·13	8,47179·18	0,61845·23	64
15	0,14494·98	8,89921·03	8,46877·22	0,62811·56	65
16	0,15461·31	8,87573·61	8,46583·92	0,63777·89	66
17	0,16427·64	8,85394·38	8,46298·99	0,64744·22	67
18	0,17393·97	8,83363·92	8,46022·11	0,65710·55	68
19	0,18360·30	8,81465·92	8,45753·02	0,66676·89	69
20	0,19326·63	8,79686·61	8,45491·46	0,67643·22	70
21	0,20292·97	8,78014·23	8,45237·16	0,68609·55	71
22	0,21259·30	8,76438·69	8,44989·91	0,69575·88	72
23	0,22225·63	8,74951·19	8,44749·44	0,70542·21	73
24	0,23191·96	8,73544·10	8,44515·54	0,71508·54	74
25	0,24158·29	8,72210·71	8,44288·00	0,72474·88	75
26	0,25124·62	8,70945·09	8,44066·62	0,73441·21	76
27	0,26090·96	8,69742·01	8,43851·20	0,74407·54	77
28	0,27057·29	8,68596·79	8,43641·53	0,75373·87	78
29	0,28023·62	8,67505·22	8,43437·47	0,76340·20	79
30	0,28989·95	8,66463·57	8,43238·82	0,77306·53	80
31	0,29956·28	8,65468·47	8,43045·41	0,78272·87	81
32	0,30922·61	8,64516·82	8,42857·08	0,79239·20	82
33	0,31888·95	8,63605·86	8,42673·69	0,80205·53	83
34	0,32855·28	8,62733·05	8,42495·08	0,81171·86	84
35	0,33821·61	8,61896·08	8,42321·10	0,82138·19	85
36	0,34787·94	8,61092·85	8,42151·63	0,83104·52	86
37	0,35754·27	8,60321·40	8,41986·53	0,84070·86	87
38	0,36720·60	8,59579·96	8,41825·66	0,85037·19	88
39	0,37686·94	8,58866·87	8,41668·90	0,86003·52	89
40	0,38653·27	8,58180·61	8,41516·13	0,86969·85	90
41	0,39619·60	8,57519·79	8,41367·26	0,87936·18	91
42	0,40585·93	8,56883·09	8,41222·14	0,88902·51	92
43	0,41552·26	8,56269·29	8,41080·69	0,89868·85	93
44	0,42518·59	8,55677·28	8,40942·79	0,90835·18	94
45	0,43484·93	8,55106·01	8,40808·36	0,91801·51	95
46	0,44451·26	8,54554·47	8,40677·28	0,92767·84	96
47	0,45417·59	8,54021·77	8,40549·46	0,93734·17	97
48	0,46383·92	8,53507·03	8,40424·83	0,94700·50	98
49	0,47350·25	8,53009·45	8,40303·28	0,95666·84	99
50	0,48316·58	8,52528·28	8,40184·73	0,96633·17	100
			8,35218·25		Perp

$2\frac{3}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01019·39	0,01019·39	8,53185·29	0,51988·97	51
2	0,02038·78	9,71423·09	8,52751·40	0,53008·36	52
3	0,03058·17	9,54318·69	8,52331·72	0,54027·75	53
4	0,04077·57	9,42327·52	8,51925·65	0,55047·14	54
5	0,05096·96	9,33137·25	8,51532·64	0,56066·53	55
6	0,06116·35	9,25717·86	8,51152·15	0,57085·92	56
7	0,07135·74	9,19519·91	8,50783·67	0,58105·31	57
8	0,08155·13	9,14215·48	8,50426·73	0,59124·71	58
9	0,09174·52	9,09592·97	8,50080·89	0,60144·10	59
10	0,10193·91	9,05508·01	8,49745·71	0,61163·49	60
11	0,11213·31	9,01857·51	8,49420·78	0,62182·88	61
12	0,12232·70	8,98565·46	8,49105·72	0,63202·27	62
13	0,13252·09	8,95574·04	8,48800·16	0,64221·66	63
14	0,14271·48	8,92838·40	8,48503·75	0,65241·05	64
15	0,15290·87	8,90322·91	8,48216·16	0,66260·45	65
16	0,16310·26	8,87998·90	8,47937·06	0,67279·84	66
17	0,17329·66	8,85842·88	8,47666·16	0,68299·23	67
18	0,18349·05	8,83835·42	8,47403·17	0,69318·62	68
19	0,19368·44	8,81960·24	8,47147·80	0,70338·01	69
20	0,20387·83	8,80203·55	8,46899·81	0,71357·40	70
21	0,21407·22	8,78553·60	8,46658·92	0,72376·80	71
22	0,22426·61	8,77000·26	8,46424·91	0,73396·19	72
23	0,23446·00	8,75534·79	8,46197·53	0,74415·58	73
24	0,24465·40	8,74149·52	8,45976·59	0,75434·97	74
25	0,25484·79	8,72837·75	8,45761·83	0,76454·36	75
26	0,26504·18	8,71593·57	8,45553·08	0,77473·75	76
27	0,27523·57	8,70411·73	8,45350·14	0,78493·14	77
28	0,28542·96	8,69287·54	8,45152·83	0,79512·54	78
29	0,29502·35	8,68216·82	8,44960·94	0,80531·93	79
30	0,30581·74	8,67195·84	8,44774·3	0,81551·32	80
31	0,31601·14	8,66221·19	8,44592·81	0,82570·71	81
32	0,32620·53	8,65289·81	8,44416·24	0,83590·10	82
33	0,33639·92	8,64398·93	8,44244·45	0,84609·49	83
34	0,34659·31	8,63546·00	8,44077·30	0,85628·88	84
35	0,35678·70	8,62728·74	8,43914·65	0,86648·28	85
36	0,36698·09	8,61945·00	8,43756·35	0,87667·67	86
37	0,37717·48	8,61192·87	8,43602·29	0,88687·06	87
38	0,38736·88	8,60470·55	8,43452·32	0,89706·45	88
39	0,39756·27	8,59776·41	8,43306·33	0,90725·84	89
40	0,40775·66	8,59108·91	8,43164·21	0,91745·23	90
41	0,41795·05	8,58466·66	8,43025·82	0,92764·62	91
42	0,42814·44	8,57848·34	8,42891·07	0,93784·02	92
43	0,43833·83	8,57252·74	8,42759·85	0,94803·41	93
44	0,44853·23	8,56678·76	8,42632·05	0,95822·80	94
45	0,45872·62	8,56125·31	8,42507·58	0,96842·19	95
46	0,46892·01	8,55591·44	8,42386·35	0,97861·58	96
47	0,47911·40	8,55076·19	8,42268·24	0,98880·97	97
48	0,48930·79	8,54578·74	8,42153·20	0,99900·37	98
49	0,49950·18	8,54098·27	8,42041·11	1,00919·76	99
50	0,50969·57	8,53634·03	8,41931·90	1,01939·15	100
			8,37566·36		Perp

For explanation see pp. 216–228

$2\frac{1}{2}$ Per Cent.

Years	Log. rⁿ.	Log. aⁿ.	Log. aⁿ.	Log. rⁿ.	Years
1	0,01072·39	0,01072·39	8,54293·36	0,54691·71	51
2	0,02144·77	9,71502·27	8,53875·55	0,55764·10	52
3	0,03217·16	9,54423·83	8,53471·76	0,56836·49	53
4	0,04289·55	9,42458·42	8,53081·40	0,57908·87	54
5	0,05361·93	9,33293·68	8,52703·92	0,58981·26	55
6	0,06434·32	9,25899·62	8,52338·78	0,60053·65	56
7	0,07506·71	9,19726·80	8,51985·48	0,61126·03	57
8	0,08579·09	9,14447·26	8,51643·54	0,62198·42	58
9	0,09651·48	9,09849·45	8,51312·52	0,63270·81	59
10	0,10723·87	9,05788·95	8,50991·99	0,64343·19	60
11	0,11796·25	9,02162·73	8,50681·53	0,65415·58	61
12	0,12868·64	8,98894·73	8,50380·78	0,66487·97	62
13	0,13941·03	8,95927·17	8,50089·34	0,67560·35	63
14	0,15013·41	8,93215·16	8,49806·90	0,68632·74	64
15	0,16085·80	8,90723·11	8,49533·10	0,69705·13	65
16	0,17158·18	8,88422·30	8,49267·63	0,70777·51	66
17	0,18230·57	8,86289·29	8,49010·20	0,71849·90	67
18	0,19302·96	8,84304·63	8,48760·50	0,72922·28	68
19	0,20375·34	8,82452·04	8,48518·27	0,73994·67	69
20	0,21447·73	8,80717·72	8,48283·24	0,75067·06	70
21	0,22520·12	8,79089·94	8,48055·17	0,76139·44	71
22	0,23592·50	8,77558·57	8,47833·80	0,77211·83	72
23	0,24664·89	8,76114·85	8,47618·91	0,78284·22	73
24	0,25737·28	8,74751·14	8,47410·29	0,79356·60	74
25	0,26809·66	8,73460·72	8,47207·72	0,80428·99	75
26	0,27882·05	8,72237·68	8,47010·99	0,81501·38	76
27	0,28954·44	8,71076·77	8,46819·91	0,82573·76	77
28	0,30026·82	8,69973·31	8,46634·31	0,83646·15	78
29	0,31099·21	8,68923·13	8,46453·99	0,84718·54	79
30	0,32171·60	8,67922·47	8,46278·79	0,85790·92	80
31	0,33243·98	8,66967·94	8,46108·53	0,86863·31	81
32	0,34316·37	8,66056·49	8,45943·08	0,87935·70	82
33	0,35388·76	8,65185·33	8,45782·26	0,89008·08	83
34	0,36461·14	8,64351·93	8,45625·94	0,90080·47	84
35	0,37533·53	8,63553·99	8,45473·97	0,91152·86	85
36	0,38605·92	8,62789·39	8,45326·23	0,92225·24	86
37	0,39678·30	8,62056·18	8,45182·56	0,93297·63	87
38	0,40750·69	8,61352·59	8,45042·85	0,94370·02	88
39	0,41823·08	8,60676·98	8,44906·99	0,95442·40	89
40	0,42895·46	8,60027·83	8,44774·84	0,96514·79	90
41	0,43967·85	8,59403·72	8,44646·31	0,97587·18	91
42	0,45040·23	8,58803·36	8,44521·27	0,98659·56	92
43	0,46112·62	8,58225·53	8,44399·64	0,99731·95	93
44	0,47185·01	8,57669·11	8,44281·29	1,00804·33	94
45	0,48257·39	8,57133·06	8,44166·15	1,01876·72	95
46	0,49329·78	8,56616·35	8,44054·10	1,02949·11	96
47	0,50402·17	8,56118·12	8,43945·07	1,04021·49	97
48	0,51474·55	8,55637·48	8,43838·95	1,05093·88	98
49	0,52546·94	8,55173·64	8,43735·68	1,06166·27	99
50	0,53619·33	8,54725·84	8,43635·16	1,07238·65	100
			8,39794·00		Perp.

$2\frac{5}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01125·32	0,01125·32	8,55387·14	0,57391·17	51
2	0,02250·63	9,71581·33	8,54984·90	0,58516·48	52
3	0,03375·95	9,54528·79	8,54596·51	0,59641·80	53
4	0,04501·27	9,42589·07	8,54221·36	0,60767·12	54
5	0,05626·59	9,33449·80	8,53858·90	0,61892·44	55
6	0,06751·90	9,26080·97	8,53508·61	0,63017·75	56
7	0,07877·22	9,19933·16	8,53169·96	0,64143·07	57
8	0,09002·54	9,14678·41	8,52842·49	0,65268·39	58
9	0,10127·85	9,10105·19	8,52525·77	0,66393·70	59
10	0,11253·17	9,06069·03	8,52219·35	0,67519·02	60
11	0,12378·49	9,02466·94	8,51922·83	0,68644·34	61
12	0,13503·80	8,99222·85	8,51635·83	0,69769·65	62
13	0,14629·12	8,96278·97	8,51357·98	0,70894·97	63
14	0,15754·44	8,93590·42	8,51088·94	0,72020·29	64
15	0,16879·76	8,01121·61	8,50828·38	0,73145·61	65
16	0,18005·07	8,88843·83	8,50575·97	0,74270·92	66
17	0,19130·39	8,86733·61	8,50331·43	0,75396·24	67
18	0,20255·71	8,84771·55	8,50094·45	0,76521·56	68
19	0,21381·02	8,82941·31	8,49864·78	0,77646·87	69
20	0,22506·34	8,81229·15	8,49642·15	0,78772·19	70
21	0,23631·66	8,79623·30	8,49426·29	0,79897·51	71
22	0,24756·97	8,78113·65	8,49217·00	0,81022·82	72
23	0,25882·29	8,76691·42	8,49014·01	0,82148·14	73
24	0,27007·61	8,75348·99	8,48817·13	0,83273·46	74
25	0,28132·93	8,74079·64	8,48626·14	0,84398·78	75
26	0,29258·24	8,72877·45	8,48440·84	0,85524·09	76
27	0,30383·56	8,71737·17	8,48261·04	0,86649·41	77
28	0,31508·88	8,70654·14	8,48086·55	0,87774·73	78
29	0,32634·19	8,69624·17	8,47917·20	0,88900·04	79
30	0,33759·51	8,68643·52	8,47752·80	0,90025·36	80
31	0,34884·83	8,67708·78	8,47593·21	0,91150·68	81
32	0,36010·14	8,66816·90	8,47438·26	0,92275·99	82
33	0,37135·46	8,65965·11	8,47287·81	0,93401·31	83
34	0,38260·78	8,65150·88	8,47141·70	0,94526·63	84
35	0,39386·10	8,64371·89	8,46999·80	0,95651·95	85
36	0,40511·41	8,63626·03	8,46861·98	0,96777·26	86
37	0,41636·73	8,62911·38	8,46728·10	0,97902·58	87
38	0,42762·05	8,62226·13	8,46598·05	0,99027·90	88
39	0,43887·36	8,61568·65	8,46471·69	1,00153·21	89
40	0,45012·68	8,60937·42	8,46348·91	1,01278·53	90
41	0.46138·00	8,60331·05	8,46229·62	1,02403·85	91
42	0,47263·31	8,59748·22	8,46113·68	1,03529·16	92
43	0,48388·63	8,59187·72	8,46001·01	1,04654·48	93
44	0,49513·95	8,58648·42	8,45891·50	1,05779·80	94
45	0,50639·27	8,58129·29	8,45785·06	1,06905·12	95
46	0,51764·58	8,57629·35	8,45681·59	1,08030·43	96
47	0,52889·90	8,57147·65	8,45581·00	1,09155·75	97
48	0,54015·22	8,56683·36	8,45483·22	1,10281·07	98
49	0,55140·53	8,56235·68	8,45388·13	1,11406·38	99
50	0,56265·85	8,55803·84	8,45295·69	1,12531·70	100
			8,41912·93		Perp.

$2\frac{3}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01178·18	0,01178·18	8,56466·78	0,60087·34	51
2	0,02356·37	9,71660·28	8,56079·64	0,61265·52	52
3	0,03534·55	9,54633·59	8,55706·15	0,62443·70	53
4	0,04712·73	9,42719·49	8,55345·71	0,63621·88	54
5	0,05890·92	9,33605·59	8,54997·78	0,64800·07	55
6	0,07069·10	9,26261·92	8,54661·81	0,65978·25	56
7	0,08247·28	9,20139·02	8,54337·31	0,67156·43	57
8	0,09425·46	9,14908·96	8,54023·81	0,68334·62	58
9	0,10603·65	9,10360·17	8,53720·85	0,69512·80	59
10	0,11781·83	9,06348·24	8,53428·02	0,70690·98	60
11	0,12960·01	9,02770·14	8,53144·91	0,71869·17	61
12	0,14138·20	8,99549·79	8,52871·14	0,73047·35	62
13	0,15316·38	8,96629·44	8,52606·34	0,74225·53	63
14	0,16494·56	8,93964·19	8,52350·17	0,75403·72	64
15	0,17672·75	8,91518·44	8,52102·30	0,76581·90	65
16	0,18850·93	8,89263·51	8,51862·41	0,77760·08	66
17	0,20029·11	8,87175·89	8,51630·21	0,78938·26	67
18	0,21207·29	8,85236·18	8,51405·41	0,80116·45	68
19	0,22385·48	8,83428·09	8,51187·74	0,81294·63	69
20	0,23563·66	8,81737·85	8,50976·93	0,82472·81	70
21	0,24741·84	8,80153·69	8,50772·75	0,83651·00	71
22	0,25920·03	8,78665·49	8,50574·95	0,84829·18	72
23	0,27098·21	8,77264·51	8,50383·30	0,86007·36	73
24	0,28276·39	8,75943·09	8,50197·59	0,87185·55	74
25	0,29454·58	8,74694·52	8,50017·61	0,88363·73	75
26	0,30632·76	8,73512·89	8,49843·16	0,89541·91	76
27	0,31810·94	8,72392·96	8,49674·05	0,90720·09	77
28	0,32989·13	8,71330·05	8,49510·10	0,91898·28	78
29	0,34167·31	8,70319·98	8,49351·12	0,93076·46	79
30	0,35345·49	8,69359·00	8,49196·96	0,94254·64	80
31	0,36523·67	8,68443·72	8,49047·45	0,95432·83	81
32	0,37701·86	8,67571·08	8,48902·44	0,96611·01	82
33	0,38880·04	8,66738·32	8,48761·76	0,97789·19	83
34	0,40058·22	8,65942·89	8,48625·28	0,98967·38	84
35	0,41236·41	8,65182·48	8,48492·87	1,00145·56	85
36	0,42414·59	8,64455·00	8,48364·40	1,01323·74	86
37	0,43592·77	8,63758·51	8,48239·72	1,02501·93	87
38	0,44770·96	8,63091·21	8,48118·72	1,03680·11	88
39	0,45949·14	8,62451·47	8,48001·29	1,04858·29	89
40	0,47127·32	8,61837·77	8,47887·30	1,06036·47	90
41	0,48305·51	8,61248·72	8,47776·64	1,07214·66	91
42	0,49483·69	8,60682·99	8,47669·23	1,08392·84	92
43	0,50661·87	8,60139·40	8,47564·94	1,09571·02	93
44	0,51840·05	8,59616·81	8,47463·68	1,10749·21	94
45	0,53018·24	8,59114·17	8,47365·35	1,11927·39	95
46	0,54196·42	8,58630·51	8,47269·87	1,13105·57	96
47	0,55374·60	8,58164·91	8,47177·15	1,14283·76	97
48	0,56552·79	8,57716·51	8,47087·10	1,15461·94	98
49	0,57730·97	8,57284·52	8,46999·64	1,16640·12	99
50	0,58909·15	8,56868·18	8,46914·69	1,17818·31	100
			8,43933·27		Perp.

$2\frac{7}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01230·98	0,01230·98	8,57532·41	0,62780·23	51
2	0,02461·97	9,71739·12	8,57159·90	0,64011·21	52
3	0,03692·95	9,54738·21	8,56800·85	0,65242·20	53
4	0,04923·94	9,42849·66	8,56454·64	0,66473·18	54
5	0,06154·92	9,33761·07	8,56120·75	0,67704·17	55
6	0,07385·91	9,26442·45	8,55798·62	0,68935·15	56
7	0,08616·89	9,20344·38	8,55487·76	0,70166·13	57
8	0,09847·88	9,15138·89	8,55187·72	0,71397·12	58
9	0,11078·86	9,10614·43	8,54898·03	0,72628·10	59
10	0,12309·85	9,06626·59	8,54618·27	0,73859·09	60
11	0,13540·83	9,03072·33	8,54348·06	0,75090·07	61
12	0,14771·82	8,99875·58	8,54086·99	0,76321·06	62
13	0,16002·80	8,96978·60	8,53834·72	0,77552·04	63
14	0,17233·79	8,94336·46	8,53590·89	0,78783·03	64
15	0,18464·77	8,91913·59	8,53355·18	0,80014·01	65
16	0,19695·76	8,89681·29	8,53127·28	0,81245·00	66
17	0,20926·74	8,87616·09	8,52906·89	0,82475·98	67
18	0,22157·73	8,85698·54	8,52693·72	0,83706·97	68
19	0,23388·71	8,83912·38	8,52487·51	0,84937·95	69
20	0,24619·70	8,82243·82	8,52288·00	0,86168·94	70
21	0,25850·68	8,80681·12	8,52094·94	0,87399·92	71
22	0,27081·67	8,79214·13	8,51908·09	0,88630·91	72
23	0,28312·65	8,77834·13	8,51727·23	0,89861·89	73
24	0,29543·64	8,76533·45	8,51552·14	0,91092·88	74
25	0,30774·62	8,75305·39	8,51382·63	0,92323·86	75
26	0,32005·61	8,74144·05	8,51218·47	0,93554·85	76
27	0,33236·59	8,73044·16	8,51059·50	0,94785·83	77
28	0,34467·57	8,72001·06	8,50905·53	0,96016·82	78
29	0,35698·56	8,71010·58	8,50756·38	0,97247·80	79
30	0,36929·54	8,70068·95	8,50611·90	0,98478·79	80
31	0,38160·53	8,69172·80	8,50471·90	0,99709·77	81
32	0,39391·51	8,68319·07	8,50336·25	1,00940·76	82
33	0,40622·50	8,67504·98	8,50204·80	1,02171·74	83
34	0,41853·48	8,66728·00	8,50077·41	1,03402·72	84
35	0,43084·47	8,65985·83	8,49953·92	1,04633·71	85
36	0,44315·45	8,65276·36	8,49834·22	1,05864·69	86
37	0,45546·44	8,64597·66	8,49718·19	1,07095·68	87
38	0,46777·42	8,63947·92	8,49605·69	1,08326·66	88
39	0,48008·41	8,63325·52	8,49496·62	1,09557·65	89
40	0,49239·39	8,62728·96	8,49390·86	1,10788·63	90
41	0,50470·38	8,62156·81	8,49288·30	1,12019·62	91
42	0,51701·36	8,61607·79	8,49188·83	1,13250·60	92
43	0,52932·35	8,61080·69	8,49092·36	1,14481·59	93
44	0,54163·33	8,60574·36	8,48998·80	1,15712·57	94
45	0,55394·32	8,60087·79	8,48908·04	1,16943·56	95
46	0,56625·30	8,59619·98	8,48820·00	1,18174·54	96
47	0,57856·29	8,59170·02	8,48734·59	1,19405·53	97
48	0,59087·27	8,58737·06	8,48651·73	1,20636·51	98
49	0,60318·26	8,58320·31	8,48571·34	1,21867·50	99
50	0,61549·24	8,57918·99	8,48493·33	1,23098·48	100
			8,45863·78		Perp.

3 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01283·72	0,01283·72	8,58584·21	0,65469·85	51
2	0,02567·44	9,71817·84	8,58225·86	0,66753·57	52
3	0,03851·17	9,54842·67	8,57880·78	0,68037·29	53
4	0,05134·89	9,42979·59	8,57548·32	0,69321·01	54
5	0,06418·61	9,33916·23	8,57227·98	0,70604·74	55
6	0,07702·33	9,26622·58	8,56919·22	0,71888·46	56
7	0,08986·06	9,20549·22	8,56621·52	0,73172·18	57
8	0,10269·78	9,15368·19	8,56334·42	0,74455·90	58
9	0,11553·50	9,10867·95	8,56057·53	0,75739·63	59
10	0,12837·22	9,06904·07	8,55790·35	0,77023·35	60
11	0,14120·95	9,03373·51	8,55532·53	0,78307·07	61
12	0,15404·67	9,00200·22	8,55283·67	0,79590·79	62
13	0,16688·39	8,97326·43	8,55043·41	0,80874·52	63
14	0,17972·11	8,94707·25	8,54811·42	0,82158·24	64
15	0,19255·84	8,92307·08	8,54587·36	0,83441·96	65
16	0,20539·56	8,90097·23	8,54370·93	0,84725·68	66
17	0,21823·28	8,88054·22	8,54161·83	0,86009·41	67
18	0,23107·00	8,86158·64	8,53959·78	0,87293·13	68
19	0,24390·73	8,84394·18	8,53764·51	0,88576·85	69
20	0,25674·45	8,82747·08	8,53575·76	0,89860·57	70
21	0,26958·17	8,81205·58	8,53393·29	0,91144·30	71
22	0,28241·89	8,79759·57	8,53216·86	0,92428·02	72
23	0,29525·62	8,78400·29	8,53046·27	0,93711·74	73
24	0,30809·34	8,77120·09	8,52881·27	0,94995·46	74
25	0,32093·06	8,75912·27	8,52721·68	0,96279·19	75
26	0,33376·78	8,74770·92	8,52567·30	0,97562·91	76
27	0,34660·51	8,73690·79	8,52417·94	0,98846·63	77
28	0,35944·23	8,72667·20	8,52273·41	1,00130·35	78
29	0,37227·95	8,71696·00	8,52133·56	1,01414·08	79
30	0,38511·67	8,70773·41	8,51998·21	1,02697·80	80
31	0,39795·40	8,69896·07	8,51867·20	1,03981·52	81
32	0,41079·12	8,69060·91	8,51740·38	1,05265·24	82
33	0,42362·84	8,68265·15	8,51617·61	1,06548·97	83
34	0,43646·56	8,67506·27	8,51498·76	1,07832·69	84
35	0,44930·29	8,66781·98	8,51383·67	1,09116·41	85
36	0,46214·01	8,66090·15	8,51272·22	1,10400·13	86
37	0,47497·73	8,65428·85	8,51164·30	1,11683·85	87
38	0,48781·45	8,64796·30	8,51059·77	1,12967·58	88
39	0,50065·18	8,64190·86	8,50958·53	1,14251·30	89
40	0,51348·90	8,63611·04	8,50860·46	1,15535·02	90
41	0,52632·62	8,63055·41	8,50765·46	1,16818·74	91
42	0,53916·34	8,62522·68	8,50673·42	1,18102·47	92
43	0,55200·07	8,62011·63	8,50584·25	1,19386·19	93
44	0,56483·79	8,61521·17	8,50497·85	1,20669·91	94
45	0,57767·51	8,61050·23	8,50414·14	1,21953·63	95
46	0,59051·23	8,60597·85	8,50333·02	1,23237·36	96
47	0,60334·96	8,60163·10	8,50254·40	1,24521·08	97
48	0,61618·68	8,59745·14	8,50178·22	1,25804·80	98
49	0,62902·40	8,59343·16	8,50104·37	1,27088·52	99
50	0,64186·12	8,58956·42	8,50032·80	1,28372·25	100
			8,47712·13		Perp

$3\frac{1}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a_n.	Log. r_n.	Years
1	0,01336·40	0,01336·40	8,59622·33	0,68156·20	51
2	0,02672·79	9,71896·45	8,59277·69	0,69492·60	52
3	0,04009·19	9,54946·96	8,58946·09	0,70829·00	53
4	0,05345·58	9,43109·29	8,58626·95	0,72165·39	54
5	0,06681·98	9,34071·08	8,58319·69	0,73501·79	55
6	0,08018·38	9,26802·30	8,58023·81	0,74838·18	56
7	0,09354·77	9,20753·57	8,57738·81	0,76174·58	57
8	0,10691·17	9,15596·89	8,57464·21	0,77510·98	58
9	0,12027·57	9,11120·74	8,57199·59	0,78847·37	59
10	0,13363·96	9,07180·68	8,56944·52	0,80183·77	60
11	0,14700·36	9,03673·69	8,56698·59	0,81520·17	61
12	0,16036·75	9,00523·70	8,56461·45	0,82856·56	62
13	0,17373·15	8,97672·96	8,56232·71	0,84192·96	63
14	0,18709·55	8,95076·56	8,56012·06	0,85529·35	64
15	0,20045·94	8,92698·91	8,55799·15	0,86805·75	65
16	0,21382·34	8,90511·32	8,55593·69	0,88202·15	66
17	0,22718·73	8,88490·32	8,55395·39	0,89538·54	67
18	0,24055·13	8,86616·47	8,55203·95	0,90874·94	68
19	0,25391·53	8,84873·51	8,55019·12	0,92211·34	69
20	0,26727·92	8,83247·65	8,54840·62	0,93547·73	70
21	0,28064·32	8,81727·12	8,54668·24	0,94884·13	71
22	0,29400·72	8,80301·83	8,54501·74	0,96220·52	72
23	0,30737·11	8,78963·02	8,54340·89	0,97556·92	73
24	0,32073·51	8,77703·03	8,54185·47	0,98893·32	74
25	0,33409·90	8,76515·18	8,54035·30	1,00229·71	75
26	0,34746·30	8,75393·54	8,53890·17	1,01566·11	76
27	0,36082·70	8,74332·87	8,53749·91	1,02902·50	77
28	0,37419·09	8,73328·51	8,53614·32	1,04238·90	78
29	0,38755·49	8,72376·27	8,53483·25	1,05575·30	79
30	0,40091·88	8,71472·42	8,53356·52	1,06911·69	80
31	0,41428·28	8,70613·55	8,53233·99	1,08248·09	81
32	0,42764·68	8,69796·63	8,53115·50	1,09584·49	82
33	0,44101·07	8,69018·87	8,53000·90	1,10920·88	83
34	0,45437·47	8,68277·75	8,52890·07	1,12257·28	84
35	0,46773·87	8,67570·97	8,52782·86	1,13593·67	85
36	0,48110·26	8,66896·42	8,52679·16	1,14930·07	86
37	0,49446·66	8,66252·16	8,52578·84	1,16266·47	87
38	0,50783·05	8,65636·44	8,52481·77	1,17602·86	88
39	0,52119·45	8,65047·58	8,52387·86	1,18939·26	89
40	0,53455·85	8,64484·10	8,52296·98	1,20275·65	90
41	0,54792·24	8,63944·58	8,52209·04	1,21612·05	91
42	0,56128·64	8,63427·75	8,52123·93	1,22948·45	92
43	0,57465·03	8,62932·37	8,52041·56	1,24284·84	93
44	0,58801·43	8,62457·34	8,51961·84	1,25621·24	94
45	0,60137·83	8,62001·62	8,51884·67	1,26957·64	95
46	0,61474·22	8,61564·23	8,51809·97	1,28294·03	96
47	0,62810·62	8,61144·20	8,51737·66	1,29630·43	97
48	0,64147·02	8,60740·86	8,51667·65	1,30966·82	98
49	0,65483·41	8,60353·23	8,51599·87	1,32303·22	99
50	0,66819·81	8,59980·62	8,51534·25	1,33639·62	100
			8,49485·00		Perp

$3\frac{1}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01389·01	0,01389·01	8,60646·92	0,70839·31	51
2	0,02778·01	9,71974·96	8,60315·55	0,72228·31	52
3	0,04167·02	9,55051·08	8,59997·00	0,73617·32	53
4	0,05556·02	9,43238·76	8,59690·69	0,75006·33	54
5	0,06945·03	9,34225·60	8,59396·07	0,76395·33	55
6	0,08334·04	9,26981·63	8,59112·62	0,77784·34	56
7	0,09723·04	9,20957·41	8,58839·84	0,79173·34	57
8	0,11112·05	9,15824·98	8,58577·28	0,80562·35	58
9	0,12501·05	9,11372·80	8,58324·47	0,81951·36	59
10	0,13890·06	9,07456·43	8,58081·02	0,83340·36	60
11	0,15279·07	9,03972·87	8,57846·52	0,84729·37	61
12	0,16668·07	9,00846·04	8,57620·62	0,86118·37	62
13	0,18057·08	8,98018·18	8,57402·93	0,87507·38	63
14	0,19446·08	8,95444·39	8,57193·13	0,88896·39	64
15	0,20835·09	8,93089·08	8,56990·90	0,90285·39	65
16	0,22224·10	8,90923·57	8,56795·93	0,91674·40	66
17	0,23613·10	8,88924·38	8,56607·92	0,93063·40	67
18	0,25002·11	8,87072·07	8,56426·61	0,94452·41	68
19	0,26391·11	8,85350·37	8,56251·72	0,95841·42	69
20	0,27780·12	8,83745·51	8,56083·01	0,97230·42	70
21	0,29169·13	8,82245·73	8,55920·23	0,98619·43	71
22	0,30558·13	8,80840·92	8,55763·15	1,00008·43	72
23	0,31947·14	8,79522·32	8,55611·56	1,01397·44	73
24	0,33336·14	8,78282·30	8,55465·23	1,02786·45	74
25	0,34725·15	8,77114·14	8,55323·98	1,04175·45	75
26	0,36114·16	8,76011·94	8,55187·62	1,05564·46	76
27	0,37503·16	8,74970·45	8,55055·96	1,06953·46	77
28	0,38892·17	8,73985·00	8,54928·82	1,08342·47	78
29	0,40281·17	8,73051·44	8,54806·03	1,09731·48	79
30	0,41670·18	8,72165·99	8,54687·46	1,11120·48	80
31	0,43059·19	8,71325·29	8,54572·89	1,12509·49	81
32	0,44448·19	8,70526·28	8,54462·24	1,13898·49	82
33	0,45837·20	8,69766·18	8,54355·34	1,15287·50	83
34	0,47226·21	8,69042·48	8,54252·05	1,16676·51	84
35	0,48615·21	8,68352·86	8,54152·24	1,18065·51	85
36	0,50004·22	8,67695·24	8,54055·79	1,19454·52	86
37	0,51393·22	8,67067·67	8,53962·59	1,20843·52	87
38	0,52782·23	8,66468·37	8,53872·51	1,22232·53	88
39	0,54171·24	8,65895·73	8,53785·45	1,23621·54	89
40	0,55560·24	8,65348·21	8,53701·28	1,25010·54	90
41	0,56949·25	8,64824·42	8,53619·93	1,26399·55	91
42	0,58338·25	8,64323·07	8,53541·28	1,27788·55	92
43	0,59727·26	8,63842·97	8,53465·23	1,29177·56	93
44	0,61116·27	8,63382·97	8,53391·71	1,30566·57	94
45	0,62505·27	8,62942·06	8,53320·63	1,31955·57	95
46	0,63894·28	8,62519·25	8,53251·89	1,33344·58	96
47	0,65283·28	8,62113·63	8,53185·41	1,34733·58	97
48	0,66672·29	8,61724·36	8,53121·14	1,36122·59	98
49	0,68061·30	8,61350·65	8,53058·96	1,37511·60	99
50	0,69450·30	8,60991·73	8,52998·83	1,38900·60	100
			8,51188·34		Perp.

R 2

3 ⅜ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01441·55	0,01441·55	8,61658·14	0,73519·17	51
2	0,02883·10	9,72053·35	8,61339·61	0,74960·72	52
3	0,04324·66	9,55155·02	8,61033·67	0,76402·27	53
4	0,05766·21	9,43367·98	8,60739·76	0,77843·82	54
5	0,07207·76	9,34379·82	8,60457·33	0,79285·37	55
6	0,08649·31	9,27160·56	8,60185·85	0,80726·93	56
7	0,10090·87	9,21160·74	8,59924·85	0,82168·48	57
8	0,11532·42	9,16052·46	8,59673·85	0,83610·03	58
9	0,12973·97	9,11624·14	8,59432·41	0,85051·58	59
10	0,14415·52	9,07731·34	8,59200·13	0,86493·14	60
11	0,15857·07	9,04271·06	8,58976·61	0,87934·69	61
12	0,17298·63	9,01167·24	8,58761·47	0,89376·24	62
13	0,18740·18	8,98362·11	8,58554·37	0,90817·79	63
14	0,20181·73	8,95810·76	8,58354·97	0,92259·34	64
15	0,21623·28	8,93477·62	8,58162·94	0,93700·90	65
16	0,23064·84	8,91333·99	8,57977·98	0,95142·45	66
17	0,24506·39	8,89356·40	8,57799·81	0,96584·00	67
18	0,25947·94	8,87525·43	8,57628·15	0,98025·55	68
19	0,27389·49	8,85824·80	8,57462·75	0,99467·11	69
20	0,28831·05	8,84240·71	8,57303·32	1,00908·66	70
21	0,30272·60	8,82761·44	8,57149·67	1,02350·21	71
22	0,31714·15	8,81376·87	8,57001·56	1,03791·76	72
23	0,33155·70	8,80078·24	8,56858·74	1,05233·31	73
24	0,34597·25	8,78857·90	8,56721·04	1,06674·87	74
25	0,36038·81	8,77709·16	8,56588·25	1,08116·42	75
26	0,37480·36	8,76626·12	8,56460·18	1,09557·97	76
27	0,38921·91	8,75603·53	8,56336·65	1,10999·52	77
28	0,40363·46	8,74636·72	8,56217·50	1,12441·08	78
29	0,41805·02	8,73721·51	8,56102·52	1,13882·63	79
30	0,43246·57	8,72854·17	8,55991·60	1,15324·18	80
31	0,44688·12	8,72031·32	8,55884·57	1,16765·73	81
32	0,46129·67	8,71249·89	8,55781·29	1,18207·29	82
33	0,47571·22	8,70507·13	8,55681·61	1,19648·84	83
34	0,49012·78	8,69800·50	8,55585·40	1,21090·39	84
35	0,50454·33	8,69127·71	8,55492·53	1,22531·94	85
36	0,51895·88	8,68486·66	8,55402·88	1,23973·49	86
37	0,53337·43	8,67875·41	8,55316·34	1,25415·05	87
38	0,54778·99	8,67292·19	8,55232·79	1,26856·60	88
39	0,56220·54	8,66735·37	8,55152·12	1,28298·15	89
40	0,57662·09	8,66203·45	8,55074·23	1,29739·70	90
41	0,59103·64	8,65695·01	8,54999·00	1,31181·26	91
42	0,60545·19	8,65208·77	8,54926·35	1,32622·81	92
43	0,61986·75	8,64743·53	8,54856·21	1,34064·36	93
44	0,63428·30	8,64298·18	8,54788·44	1,35505·91	94
45	0,64869·85	8,63871·66	8,54723·01	1,36947·46	95
46	0,66311·40	8,63463·02	8,54659·79	1,38389·02	96
47	0,67752·96	8,63071·35	8,54598·73	1,39830·57	97
48	0,69194·51	8,62695·79	8,54539·76	1,41272·12	98
49	0,70636·06	8,62335·56	8,54482·77	1,42713·67	99
50	0,72077·61	8,61989·91	8,54427·70	1,44155·23	100
			8,52827·38		Perp.

$3\frac{1}{2}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01494·03	0,01494·03	8,62656·17	0,76195·78	51
2	0,02988·07	9,72131·63	8,62350·03	0,77689·82	52
3	0,04482·10	9,55258·81	8,62056·28	0,79183·85	53
4	0,05976·14	9,43496·97	8,61774·35	0,80677·89	54
5	0,07470·17	9,34533·72	8,61503·66	0,82171·92	55
6	0,08964·21	9,27339·07	8,61243·73	0,83665·96	56
7	0,10458·24	9,21363·59	8,60994·06	0,85159·99	57
8	0,11952·28	9,16279·32	8,60754·19	0,86654·03	58
9	0,13446·31	9,11874·74	8,60523·67	0,88148·06	59
10	0,14940·35	9,08005·39	8,60302·11	0,89642·10	60
11	0,16434·38	9,04568·27	8,60089·11	0,91136·13	61
12	0,17928·42	9,01487·30	8,59884·30	0,92630·17	62
13	0,19422·45	8,98704·74	8,59687·33	0,94124·20	63
14	0,20916·49	8,96175·67	8,59497·87	0,95618·24	64
15	0,22410·52	8,93864·51	8,59315·60	0,97112·27	65
16	0,23904·56	8,91742·58	8,59140·20	0,98606·31	66
17	0,25398·59	8,89786·42	8,58971·42	1,00100·34	67
18	0,26892·63	8,87976·57	8,58808·95	1,01594·38	68
19	0,28386·66	8,86296·78	8,58652·57	1,03088·41	69
20	0,29880·70	8,84733·25	8,58502·01	1,04582·45	70
21	0,31374·73	8,83274·26	8,58357·02	1,06076·48	71
22	0,32868·77	8,81909·67	8,58217·40	1,07570·52	72
23	0,34362·80	8,80630·76	8,58082·92	1,09064·55	73
24	0,35856·84	8,79429·86	8,57953·39	1,10558·59	74
25	0,37350·87	8,78300·29	8,57828·60	1,12052·62	75
26	0,38844·91	8,77236·13	8,57708·38	1,13546·66	76
27	0,40338·94	8,76232·15	8,57592·53	1,15040·69	77
28	0,41832·98	8,75283·67	8,57480·89	1,16534·73	78
29	0,43327·01	8,74386·54	8,57373·31	1,18028·76	79
30	0,44821·05	8,73536·99	8,57269·61	1,19522·80	80
31	0,46315·08	8,72731·67	8,57169·65	1,21016·83	81
32	0,47809·12	8,71967·52	8,57073·29	1,22510·87	82
33	0,49303·15	8,71241·75	8,56980·39	1,24004·90	83
34	0,50797·19	8,70551·87	8,56890·83	1,25498·94	84
35	0,52291·22	8,69895·57	8,56804·46	1,26992·97	85
36	0,53785·26	8,69270·74	8,56721·18	1,28487·01	86
37	0,55279·29	8,68675·46	8,56640·87	1,29981·04	87
38	0,56773·33	8,68107·96	8,56563·41	1,31475·08	88
39	0,58267·36	8,67566·61	8,56488·71	1,32969·11	89
40	0,59761·40	8,67049·89	8,56416·65	1,34463·15	90
41	0,61255·43	8,66556·43	8,56347·14	1,35957·18	91
42	0,62749·47	8,66084·92	8,56280·09	1,37451·22	92
43	0,64243·50	8,65634·16	8,56215·41	1,38945·25	93
44	0,65737·54	8,65203·04	8,56153·00	1,40439·29	94
45	0,67231·57	8,64790·53	8,56092·79	1,41933·32	95
46	0,68725·61	8,64395·66	8,56034·69	1,43427·36	96
47	0,70219·64	8,64017·52	8,55978·64	1,44921·39	97
48	0,71713·68	8,63655·27	8,55924·54	1,46415·43	98
49	0,73207·71	8,63308·11	8,55872·35	1,47909·46	99
50	0,74701·75	8,62975·31	8,55821·96	1,49403·50	100
			8,54406·80		Perp.

$3\frac{5}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01546·45	0,01546·45	8,63641·15	0,78869·17	51
2	0,03092·91	9,72209·80	8,63347·00	0,80415·63	52
3	0,04639·36	9,55362·44	8,63065·02	0,81962·08	53
4	0,06185·82	9,43625·72	8,62794·62	0,83508·54	54
5	0,07732·27	9,34687·31	8,62535·28	0,85054·99	55
6	0,09278·73	9,27517·19	8,62286·45	0,86601·44	56
7	0,10825·18	9,21565·94	8,62047·69	0,88147·90	57
8	0,12371·63	9,16505·60	8,61818·52	0,89694·35	58
9	0,13918·09	9,12124·62	8,61598·50	0,91240·81	59
10	0,15464·54	9,08278·59	8,61387·22	0,92787·26	60
11	0,17011·00	9,04864·47	8,61184·31	0,94333·72	61
12	0,18557·45	9,01806·22	8,60989·39	0,95880·17	62
13	0,20103·91	8,99046·07	8,60802·13	0,97426·62	63
14	0,21650·36	8,96539·11	8,60622·17	0,98973·08	64
15	0,23196·82	8,94249·77	8,60449·21	1,00519·53	65
16	0,24743·27	8,92149·36	8,60282·94	1,02065·99	66
17	0,26289·72	8,90214·42	8,60123·11	1,03612·44	67
18	0,27836·18	8,88425·49	8,59969·41	1,05158·90	68
19	0,29382·63	8,86766·32	8,59821·61	1,06705·35	69
20	0,30929·09	8,85223·13	8,59679·46	1,08251·81	70
21	0,32475·54	8,83784·18	8,59542·71	1,09798·26	71
22	0,34022·00	8,82439·36	8,59411·16	1,11344·71	72
23	0,35568·45	8,81179·91	8,59284·57	1,12891·17	73
24	0,37114·90	8,79998·20	8,59162·77	1,14437·62	74
25	0,38661·36	8,78887·52	8,59045·57	1,15984·08	75
26	0,40207·81	8,77841·97	8,58932·74	1,17530·53	76
27	0,41754·27	8,76856·32	8,58824·15	1,19076·99	77
28	0,43300·72	8,75925·90	8,58719·61	1,20623·44	78
29	0,44847·18	8,75046·55	8,58618·97	1,22169·89	79
30	0,46393·63	8,74214·50	8,58522·07	1,23716·35	80
31	0,47940·09	8,73426·39	8,58428·77	1,25262·80	81
32	0,49486·54	8,72679·19	8,58338·91	1,26809·26	82
33	0,51032·99	8,71970·10	8,58252·38	1,28355·71	83
34	0,52579·45	8,71296·62	8,58169·04	1,29902·17	84
35	0,54125·90	8,70656·48	8,58088·76	1,31448·62	85
36	0,55672·36	8,70047·54	8,58011·44	1,32995·07	86
37	0,57218·81	8,69467·89	8,57936·95	1,34541·53	87
38	0,58765·27	8,68915·74	8,57865·18	1,36087·98	88
39	0,60311·72	8,68389·49	8,57796·03	1,37634·44	89
40	0,61858·17	8,67887·63	8,57729·41	1,39180·89	90
41	0,63404·63	8,67408·76	8,57665·23	1,40727·35	91
42	0,64951·08	8,66951·59	8,57603·37	1,42273·80	92
43	0,66497·54	8,66514·94	8,57543·75	1,43820·26	93
44	0,68043·99	8,66097·69	8,57486·30	1,45366·71	94
45	0,69590·45	8,65698·79	8,57430·94	1,46913·16	95
46	0,71136·90	8,65317·29	8,57377·57	1,48459·62	96
47	0,72683·35	8,64952·28	8,57326·15	1,50006·07	97
48	0,74229·81	8,64602·92	8,57276·57	1,51552·53	98
49	0,75776·26	8,64268·44	8,57228·78	1,53098·98	99
50	0,77322·72	8,63948·08	8,57182·71	1,54645·44	100
			8,55930·80		Perp.

$3\frac{3}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01598·81	0,01598·81	8,64613·25	0,81539·34	51
2	0,03197·62	9,72287·36	8,64330·69	0,83138·15	52
3	0,04796·43	9,55465·88	8,64060·06	0,84736·96	53
4	0,06395·24	9,43754·25	8,63800·81	0,86335·77	54
5	0,07994·05	9,34840·59	8,63552·38	0,87934·58	55
6	0,09592·86	9,27694·92	8,63314·26	0,89533·39	56
7	0,11191·67	9,21767·79	8,63085·99	0,91132·20	57
8	0,12790·48	9,16731·26	8,62867·09	0,92731·01	58
9	0,14389·29	9,12373·79	8,62657·14	0,94329·82	59
10	0,15988·11	9,08550·94	8,62455·74	0,95928·63	60
11	0,17586·92	9,05159·71	8,62262·50	0,97527·44	61
12	0,19185·73	9,02124·02	8,62077·05	0,99126·25	62
13	0,20784·54	8,99386·12	8,61899·06	1,00725·06	63
14	0,22383·35	8,96901·11	8,61728·18	1,02323·87	64
15	0,23982·16	8,94633·40	8,61564·11	1,03922·69	65
16	0,25580·97	8,92554·32	8,61406·56	1,05521·50	66
17	0,27179·78	8,90640·40	8,61255·26	1,07120·31	67
18	0,28778·59	8,88872·20	8,61109·89	1,08719·12	68
19	0,30377·40	8,87233·45	8,60970·26	1,10317·93	69
20	0,31976·21	8,85710·38	8,60836·09	1,11916·74	70
21	0,33575·02	8,84291·25	8,60707·15	1,13515·55	71
22	0,35173·83	8,82965·95	8,60583·25	1,15114·36	72
23	0,36772·64	8,81725·72	8,60464·16	1,16713·17	73
24	0,38371·45	8,80562·93	8,60349·67	1,18311·98	74
25	0,39970·26	8,79470·89	8,60239·62	1,19910·79	75
26	0,41569·07	8,78443·69	8,60133·80	1,21509·60	76
27	0,43167·88	8,77476·09	8,60032·05	1,23108·41	77
28	0,44766·70	8,76563·43	8,59934·21	1,24707·22	78
29	0,46365·51	8,75701·55	8,59840·11	1,26306·03	79
30	0,47964·32	8,74886·70	8,59749·60	1,27904·84	80
31	0,49563·13	8,74115·52	8,59662·54	1,29503·65	81
32	0,51161·94	8,73384·95	8,59578·79	1,31102·46	82
33	0,52760·75	8,72692·23	8,59498·22	1,32701·27	83
34	0,54359·56	8,72034·85	8,59420·71	1,34300·09	84
35	0,55958·37	8,71410·50	8,59346·13	1,35898·90	85
36	0,57557·18	8,70817·10	8,59274·37	1,37497·71	86
37	0,59155·99	8,70252·72	8,59205·31	1,39096·52	87
38	0,60754·80	8,69715·60	8,59138·85	1,40695·33	88
39	0,62353·61	8,69204·10	8,59074·89	1,42294·14	89
40	0,63952·42	8,68716·73	8,59013·33	1,43892·95	90
41	0,65551·23	8,68252·09	8,58954·08	1,45491·76	91
42	0,67150·04	8,67808·90	8,58897·05	1,47090·57	92
43	0,68748·85	8,67385·97	8,58842·14	1,48689·38	93
44	0,70347·66	8,66982·19	8,58789·29	1,50288·19	94
45	0,71946·47	8,66596·52	8,58738·41	1,51887·00	95
46	0,73545·28	8,66228·01	8,58689·42	1,53485·81	96
47	0,75144·10	8,65875·75	8,58642·26	1,55084·62	97
48	0,76742·91	8,65538·91	8,58596·86	1,56683·43	98
49	0,78341·72	8,65216·69	8,58553·13	1,58282·24	99
50	0,79940·53	8,64908·37	8,58511·03	1,59881·05	100
			8,57403·13		Perp.

$3\frac{7}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01651·10	0,01651·10	8,65572·64	0,84206·29	51
2	0,03302·21	9,72365·81	8,65301·26	0,85857·39	52
3	0,04953·31	9,55569·16	8,65041·60	0,87508·50	53
4	0,06604·41	9,43882·53	8,64793·08	0,89159·60	54
5	0,08255·52	9,34993·56	8,64555·17	0,90810·70	55
6	0,09906·62	9,27872·24	8,64327·35	0,92461·81	56
7	0,11557·73	9,21969·15	8,64109·16	0,94112·91	57
8	0,13208·83	9,16956·32	8,63900·14	0,95764·01	58
9	0,14859·93	9,12622·23	8,63699·86	0,97415·12	59
10	0,16511·04	9,08822·45	8,63507·92	0,99066·22	60
11	0,18162·14	9,05453·96	8,63323·94	1,00717·32	61
12	0,19813·24	9,02440·69	8,63147·56	1,02368·43	62
13	0,21464·35	8,99724·88	8,62978·43	1,04019·53	63
14	0,23115·45	8,97261·65	8,62816·23	1,05670·64	64
15	0,24766·56	8,95015·42	8,62660·65	1,07321·74	65
16	0,26417·66	8,92957·49	8,62511·40	1,08972·84	66
17	0,28068·76	8,91064·39	8,62368·20	1,10623·95	67
18	0,29719·87	8,89316·72	8,62230·79	1,12275·05	68
19	0,31370·97	8,87698·17	8,62098·91	1,13926·15	69
20	0,33022·07	8,86195·01	8,61972·33	1,15577·26	70
21	0,34673·18	8,84795·47	8,61850·82	1,17228·36	71
22	0,36324·28	8,83489·44	8,61734·17	1,18879·46	72
23	0,37975·38	8,82268·19	8,61622·15	1,20530·57	73
24	0,39626·49	8,81124·08	8,61514·59	1,22181·67	74
25	0,41277·59	8,80050·41	8,61411·30	1,23832·78	75
26	0,42928·70	8,79041·29	8,61312·08	1,25483·88	76
27	0,44579·80	8,78091·47	8,61216·79	1,27134·98	77
28	0,46230·90	8,77196·29	8,61125·24	1,28786·09	78
29	0,47882·01	8,76351·60	8,61037·30	1,30437·19	79
30	0,49533·11	8,75553·66	8,60952·79	1,32088·29	80
31	0,51184·21	8,74799·08	8,60871·60	1,33739·40	81
32	0,52835·32	8,74084·85	8,60730·58	1,35390·50	82
33	0,54486·42	8,73408·17	8,60718·60	1,37041·61	83
34	0,56137·53	8,72766·54	8,60646·54	1,38692·71	84
35	0,57788·63	8,72157·69	8,60577·28	1,40343·81	85
36	0,59439·73	8,71579·50	8,60510·72	1,41994·92	86
37	0,61090·84	8,71030·06	8,60446·73	1,43646·02	87
38	0,62741·94	8,70507·60	8,60385·22	1,45297·12	88
39	0,64393·04	8,70010·51	8,60326·08	1,46948·23	89
40	0,66044·15	8,69537·26	8,60269·23	1,48599·33	90
41	0,67695·25	8,69086·51	8,60214·55	1,50250·43	91
42	0,69346·35	8,68656·93	8,60162·00	1,51901·54	92
43	0,70997·46	8,68247·36	8,60111·46	1,53552·64	93
44	0,72648·56	8,67856·68	8,60062·86	1,55203·75	94
45	0,74299·67	8,67483·87	8,60016·13	1,56854·85	95
46	0,75950·77	8,67127·97	8,59971·18	1,58505·95	96
47	0,77601·87	8,66788·07	8,59927·96	1,60157·06	97
48	0,79252·98	8,66463·35	8,59886·40	1,61808·16	98
49	0,80904·08	8,66153·02	8,59846·42	1,63459·26	99
50	0,82555·18	8,65856·35	8,59807·96	1,65110·37	100
			8,58827·17		Perp.

4 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01703·33	0,01703·33	8,66519·48	0,86870·03	51
2	0,03406·67	9,72443·65	8,66258·90	0,88573·36	52
3	0,05110·00	9,55672·28	8,66009·81	0,90276·70	53
4	0,06813·34	9.44010·59	8,65771·64	0,91980·03	54
5	0,08516·67	9,35146·22	8,65543·85	0,93683·37	55
6	0,10220·00	9,28049·16	8,65325·96	0,95386·70	56
7	0,11923·34	9,22170·01	8,65117·45	0,97090·03	57
8	0,13626·67	9,17180·78	8,64917·91	0,98793·37	58
9	0,15330·01	9,12869·97	8,64726·91	1,00496·70	59
10	0,17033·34	9,09093·12	8,64544·04	1,02200·04	60
11	0,18736·67	9,05747·23	8,64368·93	1,03903·37	61
12	0,20440·01	9,02756·23	8,64201·22	1,05606·70	62
13	0,22143·34	9,00062·38	8,64040·56	1,07310·04	63
14	0,23846·68	8,97620·77	8,63886·64	1,09013·37	64
15	0,25550·01	8,95395·82	8,63739·16	1,10716·71	65
16	0,27253·34	8,93358·85	8,63597·82	1,12420·04	66
17	0,28956·68	8,91486·40	8,63462·35	1,14123·37	67
18	0,30660·01	8,89759·04	8,63332·48	1,15826·71	68
19	0,32363·34	8,88160·50	8,63207·97	1,17530·04	69
20	0,34066·68	8,86677·02	8,63088·59	1,19233·38	70
21	0,35770·01	8,85296·84	8,62974·11	1,20936·71	71
22	0,37473·35	8,84009·86	8,62864·32	1,22640·04	72
23	0,39176·68	8,82807·35	8,62759·01	1,24343·38	73
24	0,40880·01	8,81681·66	8,62657·99	1,26046·71	74
25	0,42583·35	8,80626·12	8,62561·08	1,27750·04	75
26	0,44286·68	8.79634·80	8,62468·09	1,29453·38	76
27	0,45990·02	8,78702·48	8,62378·89	1,31156·71	77
28	0,47693·35	8,77824·52	8,62293·26	1,32860·05	78
29	0,49396·68	8,76996·73	8,62211·11	1,34563·38	79
30	0,51100·02	8,76215·40	8,62132·25	1,36266·71	80
31	0,52803·35	8,75477·14	8,62056·56	1,37970·05	81
32	0,54506·69	8,74778·92	8,61983·91	1,39673·38	82
33	0,56210·02	8,74117·97	8,61914·16	1,41376·72	83
34	0,57913·35	8,73491·80	8,61847·21	1,43080·05	84
35	0,59616·69	8,72898·10	8,61782·92	1,44783·38	85
36	0,61320·0?	8,72334·80	8,61721·20	1,46486·72	86
37	0,63023·36	8,71799·95	8,61661·94	1,48190·05	87
38	0,64726·69	8,71291·83	8,61605·03	1,49893·39	88
39	0,66430·02	8,70808·79	8,61550·38	1,51596·72	89
40	0,68133·36	8,70349·33	8,61497·89	1,53300·05	90
41	0,69836·69	8,69912·09	8,61447·48	1,55003·39	91
42	0,71540·03	8,69495·78	8,61399·08	1,56706·72	92
43	0,73243·36	8,69099·20	8,61352·58	1,58410·06	93
44	0,74946·69	8,68721·27	8,61307·91	1,60113·39	94
45	0,76650·03	8,68360·94	8,61265·01	1,61816·72	95
46	0,78353·36	8,68017·27	8,61223·80	1,63520·06	96
47	0,80056·69	8,67689·37	8,61184·21	1,65223·39	97
48	0,81760·03	8,67376·39	8,61146·18	1,66926·73	98
49	0,83463·36	8,67077·56	8,61109·64	1,68630·06	99
50	0,85166·70	8,66792·16	8,61074·53	1,70333·39	100
			8,60206·00		Perp.

4 $\frac{1}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01755·50	0,01755·50	8,67453·95	0,89530·57	51
2	0,03511·00	9,72521·38	8,67203·78	0,91286·07	52
3	0,05266·50	9,55775·22	8,66964·88	0,93041·58	53
4	0,07022·01	9,44138·41	8,66736·68	0,94797·08	54
5	0,08777·51	9,35298·56	8,66518·65	0,96552·58	55
6	0,10533·01	9,28225·70	8,66310·27	0,98308·08	56
7	0,12288·51	9,22370·38	8,66111·09	1,00063·58	57
8	0,14044·01	9,17404·65	8,65920·66	1,01819·08	58
9	0,15799·51	9,13116·98	8,65738·54	1,03574·58	59
10	0,17555·01	9,09362·95	8,65564·36	1,05330·09	60
11	0,19310·52	9,06039·52	8,65397·73	1,07085·59	61
12	0,21066·02	9,03070·66	8,65238·31	1,08841·09	62
13	0,22821·52	9,00398·60	8,65085·75	1,10596·59	63
14	0,24577·02	8,97978·44	8,64939·74	1,12352·09	64
15	0,26332·52	8,95774·61	8,64799·98	1,14107·59	65
16	0,28088·02	8,93758·43	8,64666·16	1,15863·10	66
17	0,29843·52	8,91906·43	8,64538·04	1,17618·60	67
18	0,31599·03	8,90199·19	8,64415·35	1,19374·10	68
19	0,33354·53	8,88620·44	8,64297·84	1,21129·60	69
20	0,35110·03	8,87156·42	8,64185·29	1,22885·10	70
21	0,36865·53	8,85795·38	8,64077·48	1,24640·60	71
22	0,38621·03	8,84527·23	8,63974·18	1,26396·10	72
23	0,40376·53	8,83343·21	8,63875·20	1,28151·61	73
24	0,42132·03	8,82235·70	8,63780·36	1,29907·11	74
25	0,43887·54	8,81198·01	8,63689·47	1,31662·61	75
26	0,45643·04	8,80224·25	8,63602·38	1,33418·11	76
27	0,47398·54	8,79309·17	8,63518·88	1,35173·61	77
28	0,49154·04	8,78448·13	8,63438·84	1,36929·11	78
29	0,50909·54	8,77636·97	8,63362·11	1,38684·61	79
30	0,52665·04	8,76871·95	8,63288·56	1,40440·12	80
31	0,54420·54	8,76149·70	8,63218·03	1,42195·62	81
32	0,56176·05	8,75467·20	8,63150·40	1,43951·12	82
33	0,57931·55	8,74821·68	8,63085·55	1,45706·62	83
34	0,59687·05	8,74210·64	8,63023·37	1,47462·12	84
35	0,61442·55	8,73631·76	8,62963·73	1,49217·62	85
36	0,63198·05	8,73083·04	8,62906·52	1,50973·12	86
37	0,64953·55	8,72562·48	8,62851·67	1,52728·63	87
38	0,66709·05	8,72068·34	8,62799·04	1,54484·13	88
39	0,68464·56	8,71599·02	8,62748·56	1,56239·63	89
40	0,70220·06	8,71153·00	8,62700·13	1,57995·13	90
41	0,71975·56	8,70728·94	8,62653·67	1,59750·63	91
42	0,73731·06	8,70325·53	8,62609·10	1,61506·13	92
43	0,75486·56	8,69941·61	8,62566·34	1,63261·63	93
44	0,77242·06	8,69576·03	8,62525·32	1,65017·14	94
45	0,78997·56	8,69227·85	8,62485·95	1,66772·64	95
46	0,80753·07	8,68896·05	8,62448·18	1,68528·14	96
47	0,82508·57	8,68579·77	8,62411·93	1,70283·64	97
48	0,84264·07	8,68278·17	8,62377·15	1,72039·14	98
49	0,86019·57	8,67990·48	8,62343·77	1,73794·64	99
50	0,87775·07	8,67715·96	8,62311·74	1,75550·14	100
			8,61542·40		Perp

$4\frac{1}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01807·61	0,01807·61	8,68376·19	0.92187·92	51
2	0,03615·21	9,72599·01	8,68136·08	0,93995·53	52
3	0,05422·82	9,55878·01	8,67907·02	0,95803·14	53
4	0,07230·43	9,44266·01	8,67688·42	0,97610·74	54
5	0,09038·03	9,35450·62	8,67479·75	0,99418·35	55
6	0,10845·64	9,28401·84	8,67280·54	1,01225·96	56
7	0,12653·24	9,22570·26	8,67090·29	1,03033·56	57
8	0,14460·85	9,17627·92	8,66908·58	1,04841·17	58
9	0,16268·46	9,13363·29	8,66735·01	1,06648·78	59
10	0,18076·06	9,09631·94	8,66569·14	1,08456·38	60
11	0,19883·67	9,06330·85	8,66410·64	1,10263·99	61
12	0,21691·28	9,03383·97	8,66259·14	1,12071·59	62
13	0,23498·88	9,00733·55	8,66114·32	1,13879·20	63
14	0,25306·49	8,98334·69	8,65975·84	1,15686·81	64
15	0,27114·10	8,96151·80	8,65843·43	1,17494·41	65
16	0,28921·70	8,94156·22	8,65716·79	1,19302·02	66
17	0,30729·31	8,92324·48	8,65595·66	1,21109·63	67
18	0,32536·91	8,90637·17	8,65479·78	1,22917·23	68
19	0,34344·52	8,89078·01	8,65368·92	1,24724·84	69
20	0,36152·13	8,87633·24	8,65262·84	1,26532·45	70
21	0,37959·73	8,86291·12	8,65161·33	1,28340·05	71
22	0,39767·34	8,85041·55	8,65064·18	1,30147·66	72
23	0,41574·95	8,83875·80	8,64971·21	1,31955·26	73
24	0,43382·55	8,82786·22	8,64882·20	1,33762·87	74
25	0,45190·16	8,81766·13	8,64796·99	1,35570·48	75
26	0,46997·77	8,80809·65	8,64715·40	1,37378·08	76
27	0,48805·37	8,79911·55	8,64637·30	1,39185·69	77
28	0,50612·98	8,79067·16	8,64562·51	1,40993·30	78
29	0,52420·58	8,78272·34	8,64490·89	1,42800·90	79
30	0,54228·19	8,77523·36	8,64422·30	1,44608·51	80
31	0,56035·80	8,76816·83	8,64356·61	1,46416·12	81
32	0,57843·40	8,76149·75	8,64293·68	1,48223·72	82
33	0,59651·01	8,75519·36	8,64233·41	1,50031·33	83
34	0,61458·62	8,74923·13	8,64175·69	1,51838·93	84
35	0,63266·22	8,74358·80	8,64120·37	1,53646·54	85
36	0,65073·83	8,73824·30	8,64067·38	1,55454·15	86
37	0,66881·44	8,73317·68	8,64016·61	1,57261·75	87
38	0,68689·04	8,72837·21	8,63967·97	1,59069·36	88
39	0,70496·65	8,72381·26	8,63921·36	1,60876·97	89
40	0,72304·25	8,71948·36	8,63876·70	1,62684·57	90
41	0,74111·86	8,71537·12	8,63833·91	1,64492·18	91
42	0,75919·47	8,71146·29	8,63792·89	1,66299·79	92
43	0,77727·07	8,70774·66	8,63753·58	1,68107·39	93
44	0,79534·68	8,70421·13	8,63715·92	1,69915·00	94
45	0,81342·29	8,70084·71	8,63679·81	1,71722·60	95
46	0,83149·89	8,69764·42	8,63645·21	1,73530·21	96
47	0,84957·50	8,69459·41	8,63612·04	1,75337·82	97
48	0,86765·11	8,69168·82	8,63580·26	1,77145·42	98
49	0,88572·71	8,68891·89	8,63549·78	1,78953·03	99
50	0,90380·32	8,68627·91	8,63520·58	1,80760·64	100
			8,62838·89		Perp.

$4\frac{3}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1·	0,01859·65	0,01859·65	8,69286·38	0,94842·09	51
2	0,03719·30	9,72676·52	8,69055·98	0,96701·74	52
3	0,05578·95	9,55980·63	8,68836·38	0,98561·39	53
4	0,07438·60	9,44393·37	8,68627·02	1,00421·04	54
5	0,09298·24	9,35602·35	8,68427·38	1,02280·69	55
6	0,11157·89	9,28577·58	8,68236·96	1,04140·34	56
7	0,13017·54	9,22769·65	8,68055·30	1,05999·98	57
8	0,14877·19	9,17850·60	8,67881·98	1,07859·63	58
9	0,16736·84	9,13608·89	8,67716·57	1,09719·28	59
10	0,18596·49	9,09900·10	8,67558·67	1,11578·93	60
11	0,20456·14	9,06621·22	8,67407·93	1,13438·58	61
12	0,22315·79	9,03696·18	8,67263·99	1,15298·23	62
13	0,24175·44	9,01067·23	8,67126·54	1,17157·88	63
14	0,26035·08	8,98689·51	8,66995·25	1,19017·53	64
15	0,27894·73	8,96527·40	8,66869·85	1,20877·18	65
16	0,29754·38	8,94552·24	8,66750·03	1,22736·82	66
17	0,31614·03	8,92740·58	8,66635·55	1,24596·47	67
18	0,33473·68	8,91073·00	8,66526·14	1,26456·12	68
19	0,35333·33	8,89533·21	8,66421·58	1,28315·78	69
20	0,37192·98	8,88107·48	8,66321·63	1,30175·42	70
21	0,39052·63	8,86784·06	8,66226·11	1,32035·07	71
22	0,40912·27	8,85552·85	8,66134·77	1,33894·72	72
23	0,42771·92	8,84405·12	8,66047·44	1,35754·37	73
24	0,44631·57	8,83333·23	8,65963·94	1,37614·01	74
25	0,46491·22	8,82330·50	8,65884·09	1,39473·66	75
26	0,48350·87	8,81391·05	8,65807·72	1,41333·31	76
27	0,50210·52	8,80509·64	8,65734·67	1,43192·96	77
28	0,52070·17	8,79681·64	8,65664·81	1,45052·61	78
29	0,53929·82	8,78902·88	8,65597·98	1,46912·26	79
30	0,55789·47	8,78169·64	8,65534·05	1,48771·91	80
31	0,57649·11	8,77478·56	8,65472·89	1,50631·56	81
32	0,59508·76	8,76826·60	8,65414·36	1,52491·21	82
33	0,61368·41	8,76211·02	8,65358·36	1,54350·85	83
34	0,63228·06	8,75629·31	8,65304·78	1,56210·50	84
35	0,65087·71	8,75079·21	8,65253·53	1,58070·15	85
36	0,66947·36	8,74558·62	8,65204·46	1,59929·80	86
37	0,68807·01	8,74065·64	8,65157·50	1,61789·45	87
38	0,70666·66	8,73598·50	8,65112·55	1,63649·10	88
39	0,72526·31	8,73155·62	8,65069·54	1,65508·75	89
40	0,74385·95	8,72735·50	8,65028·37	1,67368·40	90
41	0,76245·60	8,72336·76	8,64988·95	1,69228·05	91
42	0,78105·25	8,71958·14	8,64951·24	1,71087·69	92
43	0,79964·90	8,71598·45	8,64915·13	1,72947·34	93
44	0,81824·55	8,71256·62	8,64880·56	1,74806·99	94
45	0,83684·20	8,70931·63	8,64847·46	1,76666·64	95
46	0,85543·85	8,70622·51	8,64815·78	1,78526·29	96
47	0,87403·50	8,70328·41	8,64785·44	1,80385·94	97
48	0,89263·14	8,70048·49	8,64756·40	1,82245·59	98
49	0,91122·79	8,69781·98	8,64728·59	1,84105·24	99
50	0,92982·44	8,69528·17	8,64701·96	1,85964·88	100
			8,64097·81		Perp.

$4\frac{1}{2}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,01911·63	0,01911·63	8,70184·69	0,97493·08	51
2	0,03823·26	9,72753·93	8,69963·65	0,99404·71	52
3	0,05734·89	9,56083·09	8,69753·17	1,01316·34	53
4	0,07646·52	9,44520·50	8,69552·71	1,03227·97	54
5	0,09558·15	9,35753·78	8,69361·74	1,05139·60	55
6	0,11469·77	9,28752·94	8,69179·78	1,07051·23	56
7	0,13381·40	9,22968·56	8,69006·37	1,08962·86	57
8	0,15293·03	9,18072·68	8,68841·06	1,10874·48	58
9	0,17204·66	9,13853·79	8,68683·47	1,12786·11	59
10	0,19116·29	9,10167·43	8,68533·19	1,14697·74	60
11	0,21027·92	9,06910·61	8,68389·87	1,16609·37	61
12	0,22939·55	9,04007·27	8,68253·16	1,18521·00	62
13	0,24851·18	9,01399·67	8,68122·74	1,20432·63	63
14	0,26762·81	8,99042·91	8,67998·31	1,22344·26	64
15	0,28674·44	8,96901·41	8,67879·57	1,24255·89	65
16	0,30586·06	8,94946·50	8,67766·24	·1,26167·52	66
17	0,32497·69	8,93154·73	8,67658·07	1,28079·15	67
18	0,34409·32	8,91506·67	8,67554·80	1,29990·78	68
19	0,36320·95	8,89986·07	8,67456·22	1,31902·40	69
20	0,38232·58	8,88579·16	8,67362·09	1,33814·03	70
21	0,40144·21	8,87274·21	8,67272·20	1,35725·66	71
22	0,42055·84	8,86061·13	8,67186·36	1,37637·29	72
23	0,43967·47	8,84931·18	8,67104·37	1,39548·92	73
24	0,45879·10	8,83876·74	8,67026·06	1,41460·55	·74
25	0,47790·73	8,82891·13	8,66951·25	1,43372·18	75
26	0,49702·36	8,81968·46	8,66879·78	1,45283·81	76
27	0,51613·98	8,81103·49	8,66811·51	1,47195·44	77
28	0,53525·61	8,80291·60	8,66746·27	1,49107·07	78
29	0,55437·24	8,79528·63	8,66683·93	1,51018·69	79
30	0,57348·87	8,78810·85	8,66624·36	1,52930·32	80
31	0,59260·50	8,78134·92	8,66567·43	1,54841·95	81
32	0,61172·13	8,77497·81	8,66513·02	1,56753·58	82
33	0,63083·76	8,76896·74	8,66461·02	1,58665·21	83
34	0,64995·39	8,76329·26	8,66411·32	1,60576·84	84
35	0,66907·02	8,75793·06	8,66363·81	1,62488·47	85
36	0,68818·65	8,75286·08	8,66318·40	1,64400·10	86
37	0,70730·27	8,74806·41	8,66274·98	1,66311·73	87
38	0,72641·90	8,74352·30	8,66233·48	1,68223·36	88
39	0,74553·53	8,73922·14	8,66193·80	1,70134·98	89
40	0,76465·16	8,73514·48	8,66155·86	1,72046·61	90
41	0,78376·79	8,73127·91	8,66119·59	1,73958·24	91
42	0,80288·42	8,72761·18	8,66084·91	1,75869·87	92
43	0,82200·05	8,72413·12	8,66051·74	1,77781·50	93
44	0,84111·68	8,72082·64	8,66020·04	1,79693·13	94
45	0,86023·31	8,71768·73	8,65989·71	1,81604·76	95
46	0,87934·94	8,71470·45	8,65960·71	1,83516·39	96
47	0,89846·57	8,71186·91	8,65932·98	1,85428·02	97
48	0,91758·19	8,70917·31	8,65906·46	1,87339·65	98
49	0,93669·82	8,70660·87	8,65881·10	1,89251·28	99
50	0,95581·45	8,70416·90	8,65856·85	1,91162·90	100
			8,65321·25		Perp

$4 \frac{5}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. d^n.	Log. r^n.	Years
1	0,01963·55	0,01963·55	8,71071·30	1,00140·90	51
2	0,03927·09	9,72831·23	8,70859·26	1,02104·45	52
3	0,05890·64	9,56185·38	8,70657·58	1,04068·00	53
4	0,07854·19	9,44647·40	8,70465·67	1,06031·54	54
5	0,09817·74	9,35904·90	8,70283·03	1,07995·09	55
6	0,11781·28	9,28927·90	8,70109·20	1,09958·64	56
7	0,13744·83	9,23166·98	8,69943·69	1,11922·18	57
8	0,15708·38	9,18294·19	8,69786·08	1,13885·73	58
9	0,17671·92	9,14097·98	8,69635·97	1,15849·28	59
10	0,19635·47	9,10433·93	8,69492·98	1,17812·83	60
11	0,21599·02	9,07199·05	8,69356·76	1,19776·37	61
12	0,23562·57	9,04317·27	8,69226·94	1,21739·92	62
13	0,25526·11	9,01730·84	8,69103·24	1,23703·47	63
14	0,27489·66	8,99394·89	8,68985·32	1,25667·01	64
15	0,29453·21	8,97273·83	8,68872·92	1,27630·56	65
16	0,31416·75	8,95338·99	8,68765·77	1,29594·11	66
17	0,33380·30	8,93566·93	8,68663·58	1,31557·66	67
18	0,35343·85	8,91938·21	8,68566·15	1,33521·20	68
19	0,37307·39	8,90436·58	8,68473·23	1,35484·75	69
20	0,39270·94	8,89048·29	8,68384·59	1,37448·30	70
21	0,41234·49	8,87761·60	8,68300·05	1,39411·84	71
22	0,43198·04	8,86566·43	8,68219·39	1,41375·39	72
23	0,45161·58	8,85454·04	8,68142·44	1,43338·94	73
24	0,47125·13	8,84416·79	8,68069·03	1,45302·49	74
25	0,49088·68	8,83448·05	8,67998·95	1,47266·03	75
26	0,51052·22	8,82541·88	8,67932·11	1,49229·58	76
27	0,53015·77	8,81693·11	8,67868·30	1,51193·13	77
28	0,54979·32	8,80897·07	8,67807·40	1,53156·67	78
29	0,56942·87	8,80149·62	8,67749·28	1,55120·22	79
30	0,58906·41	8,79447·03	8,67693·79	1,57083·77	80
31	0,60869·96	8,78785·96	8,67640·83	1,59047·32	81
32	0,62833·51	8,78163·38	8,67590·27	1,61010·86	82
33	0,64797·05	8,77576·56	8,67542·00	1,62974·41	83
34	0,66760·60	8,77022·99	8,67495·90	1,64937·96	84
35	0,68724·15	8,76500·40	8,67451·90	1,66901·50	85
36	0,70687·70	8,76006·73	8,67409·89	1,68865·05	86
37	0,72651·24	8,75540·06	8,67369·77	1,70828·60	87
38	0,74614·79	8,75098·67	8,67331·45	1,72792·14	88
39	0,76578·34	8,74680·94	8,67294·85	1,74755·69	89
40	0,78541·88	8,74285·39	8,67259·91	1,76719·24	90
41	0,80505·43	8,73910·67	8,67226·54	1,78682·79	91
42	0,82468·98	8,73555·52	8,67194·66	1,80646·33	92
43	0,84432·53	8,73218·74	8,67164·22	1,82609·88	93
44	0,86396·07	8,72899·29	8,67135·14	1,84573·43	94
45	0,88359·62	8,72596·13	8,67107·38	1,86536·97	95
46	0,90323·17	8,72308·35	8,67080·84	1,88500·52	96
47	0,92286·71	8,72035·04	8,67055·51	1,90464·07	97
48	0,94250·26	8,71775·43	8,67031·30	1,92427·62	98
49	0,96213·81	8,71528·73	8,67008·17	1,94391·16	99
50	0,98177·36	8,71294·24	8,66986·08	1,96354·71	100
			8,66511·17		Perp.

$4\frac{3}{4}$ Per Cent.

Years	Log. r.	Log. a''.	Log. a''.	Log. r^a.	Years
1	0,02015·40	0,02015·40	8,71946·35	1,02785·56	51
2	0,04030·81	9,72908·42	8,71743·01	1,04800·96	52
3	0,06046·21	9,56287·51	8,71549·78	1,06816·37	53
4	0,08061·61	9,44774·06	8,71366·10	1,08831·77	54
5	0,10077·02	9,36055·72	8,71191·48	1,10847·17	55
6	0,12092·42	9,29102·49	8,71025·44	1,12862·58	56
7	0,14107·82	9,23364·92	8,70867·50	1,14877·98	57
8	0,16123·23	9,18515·09	8,70717·27	1,16893·38	58
9	0,18138·63	9,14341·46	8,70574·32	1,18908·79	59
10	0,20154·03	9,10699·61	8,70438·30	1,20924·19	60
11	0,22169·43	9,07486·53	8,70308·84	1,22939·59	61
12	0,24184·84	9,04626·17	8,70185·62	1,24955·00	62
13	0,26200·24	9,02060·78	8,70068·30	1,26970·40	63
14	0,28215·64	8,99745·47	8,69956·60	1,28985·80	64
15	0,30231·05	8,97644·69	8,69850·24	1,31001·21	65
16	0,32246·45	8,95729·73	8,69748·94	1,33016·61	66
17	0,34261·85	8,93977·19	8,69652·44	1,35032·01	67
18	0,36277·26	8,92367·61	8,69560·54	1,37047·41	68
19	0,38292·66	8,90884·76	8,69472·97	1,39062·82	69
20	0,40308·06	8,89514·88	8,69389·54	1,41078·22	70
21	0,42323·47	8,88246·23	8,69310·05	1,43093·62	71
22	0,44338·87	8,87068·74	8,69234·29	1,45109·03	72
23	0,46354·27	8,85973·67	8,69162·10	1,47124·43	73
24	0,48369·68	8,84953·41	8,69093·28	1,49139·83	74
25	0,50385·08	8,84001·27	8,69027·69	1,51155·24	75
26	0,52400·48	8,83111·39	8,68965·17	1,53170·64	76
27	0,54415·89	8,82278·54	8,68905·56	1,55186·04	77
28	0,56431·29	8,81498·08	8,68848·74	1,57201·45	78
29	0,58446·69	8,80765·87	8,68794·56	1,59216·85	79
30	0,60462·09	8,80078·20	8,68742·90	1,61232·25	80
31	0,62477·50	8,79431·72	8,68693·64	1,63247·66	81
32	0,64492·90	8,78823·40	8,68646·64	1,65263·06	82
33	0,66508·30	8,78250·53	8,68601·87	1,67278·46	83
34	0,68523·71	8,77710·58	8,68559·15	1,69293·87	84
35	0,70539·11	8,77201·31	8,68518·40	1,71309·27	85
36	0,72554·51	8,76720·63	8,68479·55	1,73324·67	86
37	0,74569·92	8,76266·67	8,68442·47	1,75340·07	87
38	0,76585·32	8,75837·68	8,68407·12	1,77355·48	88
39	0,78600·72	8,75432·06	8,68373·39	1,79370·88	89
40	0,80616·13	8,75048·34	8,68341·22	1,81386·28	90
41	0,82631·53	8,74685·14	8,68310·52	1,83401·69	91
42	0,84646·93	8,74341·23	8,68281·24	1,85417·09	92
43	0,86662·34	8,74015·43	8,68253·31	1,87432·49	93
44	0,88677·74	8,73706·68	8,68226·66	1,89447·90	94
45	0,90693·14	8,73413·95	8,68201·23	1,91463·30	95
46	0,92708·55	8,73136·33	8,68176·97	1,93478·70	96
47	0,94723·95	8,72872·94	8,68153·83	1,95494·11	97
48	0,96739·35	8,72622·99	8,68131·74	1,97509·51	98
49	0,98754·76	8,72385·71	8,68110·67	1,99524·91	99
50	1,00770·16	8,72160·37	8,68090·56	2,01540·32	100
			8,67669·36		Perp

$4\frac{7}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02067·20	0,02067·20	8,72810·03	1,05427·07	51
2	0,04134·39	9,72985·50	8,72615·06	1,07494·26	52
3	0,06201·59	9,56389·48	8,72429·97	1,09561·46	53
4	0,08268·79	9,44900·52	8,72254·20	1,11628·66	54
5	0,10335·99	9,36206·24	8,72087·27	1,13695·86	55
6	0,12403·18	9,29276·63	8,71928·69	1,15763·05	56
7	0,14470·38	9,23562·38	8,71778·03	1,17830·25	57
8	0,16537·58	9,18735·42	8,71634·85	1,19897·45	58
9	0,18604·78	9,14584·26	8,71498·77	1,21964·65	59
10	0,20671·97	9,10964·48	8,71369·41	1,24031·84	60
11	0,22739·17	9,07773·07	8,71246·42	1,26099·04	61
12	0,24806·37	9,04933·97	8,71129·47	1,28166·24	62
13	0,26873·57	9,02389·47	8,71018·25	1,30233·44	63
14	0,28940·76	9,00094·66	8,70912·46	1,32300·63	64
15	0,31007·96	8,98013·97	8,70811·83	1,34367·83	65
16	0,33075·16	8,96118·75	8,70716·10	1,36435·03	66
17	0,35142·36	8,94385·53	8,70625·00	1,38502·22	67
18	0,37209·55	8,92794·91	8,70538·33	1,40569·42	68
19	0,39276·75	8,91330·63	8,70455·84	1,42636·62	69
20	0,41343·95	8,89978·94	8,70377·33	1,44703·82	70
21	0,43411·15	8,88728·13	8,70302·61	1,46771·01	71
22	0,45478·34	8,87568·10	8,70231·47	1,48838·21	72
23	0,47545·54	8,86490·12	8,70163·75	1,50905·41	73
24	0,49612·74	8,85486·59	8,70099·29	1,52972·61	74
25	0,51679·93	8,84550·83	8,70037·90	1,55039·80	75
26	0,53747·13	8,83676·96	8,69979·44	1,57107·00	76
27	0,55814·33	8,82859·78	8,69923·78	1,59174·20	77
28	0,57881·53	8,82094·66	8,69870·77	1,61241·40	78
29	0,59948·72	8,81377·44	8,69820·29	1,63308·59	79
30	0,62015·92	8,80704·41	8,69772·21	1,65375·79	80
31	0,64083·12	8,80072·24	8,69726·41	1,67442·99	81
32	0,66150·32	8,79477·91	8,69682·78	1,69510·19	82
33	0,68217·51	8,78918·68	8,69641·23	1,71577·38	83
34	0,70284·71	8,78392·07	8,69601·64	1,73644·58	84
35	0,72351·91	8,77895·82	8,69563·93	1,75711·78	85
36	0,74419·11	8,77427·86	8,69528·00	1,77778·97	86
37	0,76486·30	8,76986·30	8,69493·77	1,79846·17	87
38	0,78553·50	8,76569·40	8,69461·16	1,81913·37	88
39	0,80620·70	8,76175·59	8,69430·07	1,83980·57	89
40	0,82687·90	8,75803·37	8,69400·47	1,86047·76	90
41	0,84755·09	8,75451·40	8,69372·25	1,88114·96	91
42	0,86822·29	8,75118·42	8,69345·36	1,90182·16	92
43	0,88889·49	8,74803·29	8,69319·74	1,92249·36	93
44	0,90956·68	8,74504·91	8,69295·32	1,94316·55	94
45	0,93023·88	8,74222·31	8,69272·05	1,96383·75	95
46	0,95091·08	8,73954·54	8,69249·88	1,98450·95	96
47	0,97158·28	8,73700·75	8,69228·74	2,00518·15	97
48	0,99225·47	8,73460·12	8,69208·60	2,02585·34	98
49	1,01292·67	8,73231·93	8,69189·40	2,04652·54	99
50	1,03359·87	8,73015·45	8,69171·11	2,06719·74	100
			8,68797·46		Perp.

For explanation see pp. 216–228

5 Per Cent.

Years	Log. rⁿ.	Log. aⁿ.	Log. aⁿ.	Log. rⁿ.	Years
1	0,02118·93	0,02118·93	8,73662·49	1,08065·43	51
2	0,04237·86	9,73062·48	8,73475·58	1,10184·36	52
3	0,06356·79	9,56491·28	8,73298·32	1,12303·28	53
4	0,08475·72	9,45026·73	8,73130·16	1,14422·21	54
5	0,10594·65	9,36356·45	8,72970·62	1,16541·14	55
6	0,12713·58	9,29450·47	8,72819·22	1,18660·07	56
7	0,14832·51	9,23759·36	8,72675·52	1,20779·00	57
8	0,16951·44	9,18955·15	8,72539·10	1,22897·93	58
9	0,19070·37	9,14826·35	8,72409·57	1,25016·86	59
10	0,21189·30	9,11228·51	8,72286·57	1,27135·79	60
11	0,23308·23	9,08058·65	8,72169·75	1,29254·72	61
12	0,25427·16	9,05240·70	8,72058·78	1,31373·65	62
13	0,27546·09	9,02716·92	8,71953·37	1,33492·58	63
14	0,29665·02	9,00442·44	8,71853·20	1,35611·51	64
15	0,31783·95	8,98381·70	8,71758·02	1,37730·44	65
16	0,33902·88	8,96506·01	8,71667·58	1,39849·37	66
17	0,36021·81	8,94791·94	8,71581·60	1,41968·30	67
18	0,38140·74	8,93220·08	8,71499·88	1,44087·23	68
19	0,40259·67	8,91774·18	8,71422·21	1,46206·16	69
20	0,42378·60	8,90440·49	8,71348·34	1,48325·09	70
21	0,44497·53	8,89207·30	8,71278·11	1,50444·02	71
22	0,46616·46	8,88064·50	8,71211·34	1,52562·95	72
23	0,48735·39	8,87003·40	8,71147·85	1,54681·88	73
24	0,50854·32	8,86016·37	8,71087·46	1,56800·81	74
25	0,52973·25	8,85096·74	8,71030·03	1,58919·74	75
26	0,55092·18	8,84238·66	8,70975·40	1,61038·67	76
27	0,57211·11	8,83436·89	8,70923·43	1,63157·60	77
28	0,59330·04	8,82686·83	8,70874·00	1,65276·53	78
29	0,61448·97	8,81984·33	8,70826·98	1,67395·46	79
30	0,63567·90	8,81325·70	8,70782·24	1,69514·39	80
31	0,65686·83	8,80707·56	8,70739·67	1,71633·32	81
32	0,67805·76	8,80126·94	8,70699·17	1,73752·25	82
33	0,69924·69	8,79581·08	8,70660·63	1,75871·08	83
34	0,72043·62	8,79067·52	8,70623·97	1,77990·11	84
35	0,74162·55	8,78584·01	8,70589·07	1,80109·04	85
36	0,76281·48	8,78128·46	8,70555·86	1,82227·97	86
37	0,78400·41	8,77699·01	8,70524·26	1,84346·90	87
38	0,80519·34	8,77293·92	8,70494·18	1,86465·83	88
39	0,82638·27	8,76911·60	8,70465·56	1,88584·76	89
40	0,84757·20	8,76550·58	8,70438·32	1,90703·69	90
41	0,86876·13	8,76209·53	8,70412·39	1,92822·62	91
42	0,88995·06	8,75887·19	8,70387·70	1,94941·55	92
43	0,91113·99	8,75582·41	8,70364·21	1,97060·48	93
44	0,93232·92	8,75294·11	8,70341·85	1,99179·41	94
45	0,95351·85	8,75021·31	8,70320·56	2,01298·34	95
46	0,97470·78	8,74763·09	8,70300·30	2,03417·27	96
47	0,99589·71	8,74518·58	8,70281·01	2,05536·20	97
48	1,01708·64	8,74286·98	8,70262·64	2,07655·13	98
49	1,03827·57	8,74067·57	8,70245·16	2,09774·06	99
50	1,05946·50	8,73859·61	8,70228·52	2,11892·99	100
			8,69897·00		Perp

$5\frac{1}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02170·60	0,02170·60	8,74503·90	1,10700·64	51
2	0,04341·20	9,73139·34	8,74324·76	1,12871·25	52
3	0,06511·80	9,56592·92	8,74155·02	1,15041·85	53
4	0,08682·40	9,45152·72	8,73994·18	1,17212·45	54
5	0,10853·00	9,36506·37	8,73841·73	1,19383·05	55
6	0,13023·61	9,29623·89	8,73697·20	1,21553·65	56
7	0,15194·21	9,23955·85	8,73560·17	1,23724·25	57
8	0,17364·81	9,19174·31	8,73430·22	1,25894·85	58
9	0,19535·41	9,15067·75	8,73306·96	1,28065·45	59
10	0,21706·01	9,11491·73	8,73190·03	1,30236·05	60
11	0,23876·61	9,08343·27	8,73079·10	1,32406·65	61
12	0,26047·21	9,05546·32	8,72973·84	1,34577·25	62
13	0,28217·81	9,03043·14	8,72873·94	1,36747·86	63
14	0,30388·41	9,00788·84	8,72779·13	1,38918·46	64
15	0,32559·01	8,98747·86	8,72689·12	1,41089·06	65
16	0,34729·61	8,96891·55	8,72603·69	1,43259·66	66
17	0,36900·21	8,95196·44	8,72522·58	1,45430·26	67
18	0,39070·82	8,93643·16	8,72445·55	1,47600·86	68
19	0,41241·42	8,92215·44	8,72372·41	1,49771·46	69
20	0,43412·02	8,90899·55	8,72302·95	1,51942·06	70
21	0,45582·62	8,89683·75	8,72236·98	1,54112·66	71
22	0,47753·22	8,88557·98	8,72174·32	1,56283·26	72
23	0,49923·82	8,87513·51	8,72114·79	1,58453·86	73
24	0,52094·42	8,86542·75	8,72058·25	1,60624·47	74
25	0,54265·02	8,85639·03	8,72004·53	1,62795·07	75
26	0,56435·62	8,84796·48	8,71953·49	1,64965·67	76
27	0,58606·22	8,84009·88	8,71904·99	1,67136·27	77
28	0,60776·82	8,83274·64	8,71858·91	1,69306·87	78
29	0,62947·43	8,82586·60	8,71815·11	1,71477·47	79
30	0,65118·03	8,81942·08	8,71773·50	1,73648·07	80
31	0,67288·63	8,81337·71	8,71733·95	1,75818·67	81
32	0,69459·23	8,80770·53	8,71696·36	1,77989·27	82
33	0,71629·83	8,80237·78	8,71660·65	1,80159·87	83
34	0,73800·43	8,79736·98	8,71626·69	1,82330·47	84
35	0,75971·03	8,79265·92	8,71594·41	1,84501·07	85
36	0,78141·63	8,78822·51	8,71563·73	1,86671·68	86
37	0,80312·23	8,78404·87	8,71534·56	1,88842·28	87
38	0,82482·83	8,78011·28	8,71506·83	1,91012·88	88
39	0,84653·43	8,77640·17	8,71480·48	1,93183·48	89
40	0,86824·04	8,77290·08	8,71455·43	1,95354·08	90
41	0,88994·64	8,76959·63	8,71431·60	1,97524·68	91
42	0,91165·24	8,76647·63	8,71408·96	1,99695·28	92
43	0,93335·84	8,76352·90	8,71387·43	2,01865·88	93
44	0,95506·44	8,76074·38	8,71366·95	2,04036·48	94
45	0,97677·04	8,75811·08	8,71347·48	2,06207·08	95
46	0,99847·64	8,75562·10	8,71328·97	2,08377·68	96
47	1,02018·24	8,75326·57	8,71311·37	2,10548·29	97
48	1,04188·84	8,75103·70	8,71294·64	2,12718·89	98
49	1,06359·44	8,74892·76	8,71278·73	2,14889·49	99
50	1,08530·04	8,74693·04	8,71263·60	2,17060·09	100
			8,70969·39		Perp.

$5\frac{1}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a'.	Log. r^n.	Years
1	0,02222·21	0,02222·21	8,75334·45	1,13332·73	51
2	0,04444·42	9,73216·10	8,75162·77	1,15554·94	52
3	0,06666·63	9,56694·40	8,75000·28	1,17777·15	53
4	0,08888·84	9,45278·48	8,74846·45	1,19999·36	54
5	0,11111·05	9,36655·99	8,74700·80	1,22221·57	55
6	0,13333·26	9,29796·92	8,74562·87	1,24443·79	56
7	0,15555·47	9,24151·87	8,74432·23	1,26666·00	57
8	0,17777·68	9,19392·89	8,74308·46	1,28888·21	58
9	0,19999·89	9,15308·45	8,74191·19	1,31110·42	59
10	0,22222·10	9,11754·15	8,74080·07	1,33332·63	60
11	0,24444·31	9,08626·97	8,73974·74	1,35554·84	61
12	0,26666·53	9,05850·87	8,73874·92	1,37777·05	62
13	0,28888·74	9,03368·13	8,73780·28	1,39999·26	63
14	0,31110·95	9,01133·85	8,73690·55	1,42221·47	64
15	0,33333·16	8,99112·48	8,73605·47	1,44443·68	65
16	0,35555·37	8,97275·36	8,73524·79	1,46665·89	66
17	0,37777·58	8,95599·05	8,73448·27	1,48888·10	67
18	0,39999·79	8,94064·15	8,73375·69	1,51110·31	68
19	0,42222·00	8,92654·41	8,73306·85	1,53332·52	69
20	0,44444·21	8,91356·11	8,73241·53	1,55554·73	70
21	0,46666·42	8,90157·50	8,73179·58	1,57776·94	71
22	0,48888·63	8,89048·55	8,73120·78	1,59999·15	72
23	0,51110·84	8,88020·51	8,73065·00	1,62221·36	73
24	0,53333·05	8,87065·78	8,73012·07	1,64443·57	74
25	0,55555·26	8,86177·73	8,72961·84	1,66665·78	75
26	0,57777·47	8,85350·45	8,72914·16	1,68887·99	76
27	0,59999·68	8,84578·80	8,72868·91	1,71110·20	77
28	0,62221·89	8,83858·11	8,72825·97	1,73332·42	78
29	0,64444·10	8,83184·28	8,72785·20	1,75554·63	79
30	0,66666·31	8,82553·61	8,72746·50	1,77776·84	80
31	0,68888·52	8,81962·75	8,72709·77	1,79999·05	81
32	0,71110·73	8,81408·72	8,72674·90	1,82221·26	82
33	0,73332·94	8,80888·80	8,72641·79	1,84443·47	83
34	0,75555·16	8,80400·51	8,72610·36	1,86665·68	84
35	0,77777·37	8,79941·61	8,72580·51	1,88887·89	85
36	0,79999·58	8,79510·05	8,72552·17	1,91110·10	86
37	0,82221·79	8,79103·94	8,72525·27	1,93332·31	87
38	0,84444·00	8,78721·58	8,72499·72	1,95554·52	88
39	0,86666·21	8,78361·39	8,72475·46	1,97776·73	89
40	0,88888·42	8,78021·91	8,72452·42	1,99998·94	90
41	0,91110·63	8,77701·81	8,72430·55	2,02221·15	91
42	0,93332·84	8,77399·84	8,72409·77	2,04443·36	92
43	0,95555·05	8,77114·85	8,72390·04	2,06665·57	93
44	0,97777·26	8,76845·82	8,72371·31	2,08887·78	94
45	0,99999·47	8,76591·74	8,72353·51	2,11109·99	95
46	1,02221·68	8,76351·69	8,72336·61	2,13332·20	96
47	1,04443·89	8,76124·86	8,72320·55	2,15554·41	97
48	1,06666·10	8,75910·41	8,72305·31	2,17776·62	98
49	1,08888·31	8,75707·65	8,72290·84	2,19998·83	99
50	1,11110·52	8,75515·88	8,72277·07	2,22221·05	100
			8,72015·93		Perp

$5\frac{3}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02273˙76	0,02273˙76	8,76154˙27	1,15961˙70	51
2	0,04547˙52	9,73292˙75	8,75989˙78	1,18235˙46	52
3	0,06821˙28	9,56795˙73	8,75834˙25	1,20509˙21	53
4	0,09095˙04	9,45404˙02	8,75687˙16	1,22782˙97	54
5	0,11368˙79	9,36805˙31	8,75548˙05	1,25056˙73	55
6	0,13642˙55	9,29969˙57	8,75416˙42	1,27330˙49	56
7	0,15916˙31	9,24347˙41	8,75291˙90	1,29604˙25	57
8	0,18190˙07	9,19610˙89	8,75174˙04	1,31878˙01	58
9	0,20463˙83	9,15548˙48	8,75062˙50	1,34151˙77	59
10	0,22737˙59	9,12015˙75	8,74956˙91	1,36425˙53	60
11	0,25011˙35	9,08909˙72	8,74856˙94	1,38699˙28	61
12	0,27285˙11	9,06154˙34	8,74762˙28	1,40973˙04	62
13	0,29558˙86	9,03691˙89	8,74672˙65	1,43246˙80	63
14	0,31832˙62	9,01477˙48	8,74587˙75	1,45520˙56	64
15	0,34106˙38	8,99475˙54	8,74507˙34	1,47794˙32	65
16	0,36389˙14	8,97657˙46	8,74431˙17	1,50068˙08	66
17	0,38653˙90	8,95999˙76	8,74359˙01	1,52341˙84	67
18	0,40927˙66	8,94483˙07	8,74290˙63	1,54615˙60	68
19	0,43201˙42	8,93091˙12	8,74225˙86	1,56889˙35	69
20	0,45475˙18	8,91810˙20	8,74164˙46	1,59163˙11	70
21	0,47748˙93	8,90628˙57	8,74106˙27	1,61436˙87	71
22	0,50022˙69	8,89536˙21	8,74051˙13	1,63710˙63	72
23	0,52296˙45	8,88524˙37	8,73998˙87	1,65984˙39	73
24	0,54570˙21	8,87585˙47	8,73949˙34	1,68258˙15	74
25	0,56843˙97	8,86712˙84	8,73902˙38	1,70531˙91	75
26	0,59117˙73	8,85900˙62	8,73857˙87	1,72805˙67	76
27	0,61391˙49	8,85143˙64	8,73815˙66	1,75079˙42	77
28	0,63665˙25	8,84437˙27	8,73775˙64	1,77353˙18	78
29	0,65939˙00	8,83777˙40	8,73737˙70	1,79626˙94	79
30	0,68212˙76	8,83160˙32	8,73701˙73	1,81900˙70	80
31	0,70486˙52	8,82582˙71	8,73667˙62	1,84174˙46	81
32	0,72760˙28	8,82041˙58	8,73635˙28	1,86448˙22	82
33	0,75034˙04	8,81534˙22	8,73604˙60	1,88721˙98	83
34	0,77307˙80	8,81058˙15	8,73575˙51	1,90995˙74	84
35	0,79581˙56	8,80611˙14	8,73547˙92	1,93269˙49	85
36	0,81855˙32	8,80191˙15	8,73521˙76	1,95543˙25	86
37	0,84129˙07	8,79796˙30	8,73496˙95	1,97817˙01	87
38	0,86402˙83	8,79424˙89	8,73473˙40	2,00090˙77	88
39	0,88676˙59	8,79075˙33	8,73451˙08	2,02364˙53	89
40	0,90950˙35	8,78746˙19	8,73429˙91	2,04638˙29	90
41	0,93224˙11	8,78436˙12	8,73409˙83	2,06912˙05	91
42	0,95497˙87	8,78143˙91	8,73390˙77	2,09185˙81	92
43	0,97771˙63	8,77868˙41	8,73372˙71	2,11459˙56	93
44	1,00045˙39	8,77608˙56	8,73355˙57	2,13733˙32	94
45	1,02319˙14	8,77363˙39	8,73339˙30	2,16007˙08	95
46	1,04592˙90	8,77132˙01	8,73323˙87	2,18280˙84	96
47	1,06866˙66	8,76913˙57	8,73309˙24	2,20554˙60	97
48	1,09140˙42	8,76707˙27	8,73295˙36	2,22828˙36	98
49	1,11414˙18	8,76512˙41	8,73282˙19	2,25102˙12	99
50	1,13687˙94	8,76328˙28	8,73269˙69	2,27375˙88	100
			8,73037˙85		Perp.

$5\frac{1}{2}$ Per Cent.

Years	Log. r.	Log. a^n.	Log. a^n.	Log. r.	Years
1	0,02325·25	0,02325·25	2,76963·55	1,18587·54	51
2	0,04650·49	9,73369·31	8,76805·96	1,20913·79	52
3	0,06975·74	9,56896·88	8,76657·12	1,23238·04	53
4	0,09300·98	9,45529·33	8,76516·51	1,25563·28	54
5	0,11626·23	9,36954·32	8,76383·64	1,27888·53	55
6	0,13951·48	9,30141·85	8,76258·08	1,30213·77	56
7	0,16276·72	9,24542·48	8,76139·40	1,32539·02	57
8	0,18601·97	9,19828·31	8,76027·21	1,34864·27	58
9	0,20927·21	9,15787·81	8,75921·14	1,37189·51	59
10	0,23252·46	9,12276·54	8,75820·82	1,39514·76	60
11	0,25577·71	9,09191·53	8,75725·94	1,41840·00	61
12	0,27902·95	9,06456·75	8,75636·22	1,44165·25	62
13	0,30228·20	9,04014·42	8,75551·34	1,46490·50	63
14	0,32553·44	9,01819·72	8,75471·04	1,48815·74	64
15	0,34878·69	8,99837·09	8,75395·06	1,51140·99	65
16	0,37203·94	8,98037·86	8,75323·16	1,53466·23	66
17	0,39529·18	8,96398·59	8,75255·12	1,55791·48	67
18	0,41854·43	8,94899·91	8,75190·72	1,58116·73	68
19	0,44179·67	8,93525·55	8,75129·77	1,60441·97	69
20	0,46504·92	8,92261·82	8,75072·08	1,62767·22	70
21	0,48830·17	8,91096·99	8,75017·47	1,65092·46	71
22	0,51155·41	8,90021·00	8,74965·76	1,67417·71	72
23	0,53480·66	8,89025·13	8,74916·81	1,69742·96	73
24	0,55805·90	8,88101·82	8,74870·46	1,72068·20	74
25	0,58131·15	8,87244·38	8,74826·57	1,74393·45	75
26	0,60456·40	8,86446·99	8,74785·02	1,76718·69	76
27	0,62781·64	8,85704·46	8,74745·66	1,79043·94	77
28	0,65106·89	8,85012·16	8,74708·39	1,81369·18	78
29	0,67432·13	8,84365·98	8,74673·09	1,83694·43	79
30	0,69757·38	8,83762·25	8,74639·67	1,86019·68	80
31	0,72082·62	8,83197·62	8,74608·00	1,88344·92	81
32	0,74407·87	8,82669·14	8,74578·00	1,90670·17	82
33	0,76733·12	8,82174·07	8,74549·60	1,92995·41	83
34	0,79058·36	8,81709·96	8,74522·68	1,95320·66	84
35	0,81383·61	8,81274·58	8,74497·18	1,97645·91	85
36	0 83708·85	8,80865·88	8,74473·04	1,99971·15	86
37	0,86034·10	8,80482·02	8,74450·16	2,02296·40	87
38	0,88359·35	8,80121·27	8,74428·49	2,04621·64	88
39	0,90684·59	8,79782·07	8,74407·95	2,06946·89	89
40	0,93009·84	8,79462·99	8,74388·49	2,09272·14	90
41	0,95335·08	8,79162·68	8,74370·06	2,11597·38	91
42	0,97660·33	8 78879·93	8,74352·59	2,13922·63	92
43	0,99985·58	8,78613·62	8,74336·05	2,16247·87	93
44	1,02310·82	8,78362·69	8,74320·36	2,18573·12	94
45	1,04636·07	8,78126·17	8,74305·52	2,20898·37	95
46	1,06961·31	8,77903·16	8,74291·44	2,23223·61	96
47	1,09286·56	8,77692·83	8,74278·10	2,25548·86	97
48	1,11611·81	8,77494·41	8,74265·45	2,27874·10	98
49	1,13937·05	8,77307·16	8,74253·48	2,30199·35	99
50	1,16262·30	8,77130·41	8,74242·13	2,32524·60	100
			8,74036·27		Perp.

$5\frac{5}{8}$ Per Cent.

Years	Log. r.	Log. a^u.	Log. a^n.	Log. r.	Years
1	0,02376·67	0,02376·67	8,77762·42	1,21210·28	51
2	0,04753·34	9,73445·76	8,77611·49	1,23386·95	52
3	0,07130·02	9,56997·88	8,77469·07	1,25963·63	53
4	0,09506·69	9,45654·42	8,77334·67	1,28340·30	54
5	0,11883·36	9,37103·04	8,77207·81	1,30716·97	55
6	0,14260·03	9,30313·73	8,77088·05	1,33093·64	56
7	0,16636·71	9,24737·08	8,76974·98	1,35470·32	57
8	0,19013·38	9,20045·16	8,76868·19	1,37846·99	58
9	0,21390·05	9,16026·45	8,76767·32	1,40223·66	59
10	0,23766·72	9,12536·53	8,76672·05	1,42600·33	60
11	0,26143·39	9,09472·42	8,76582·04	1,44977·00	61
12	0,28520·07	9,06758·06	8,76497·00	1,47353·68	62
13	0,30896·74	9,04335·76	8,76416·63	1,49730·35	63
14	0,33273·41	9,02160·62	8,76340·69	1,52107·02	64
15	0,35650·08	9,00197·10	8,76268·91	1,54483·69	65
16	0,38026·76	8,98416·55	8,76201·06	1,56860·37	66
17	0,40403·43	8,96795·54	8,76136·92	1,59237·04	67
18	0,42780·10	8,95314·68	8,76076·29	1,61613·71	68
19	0,45156·77	8,93957·74	8,76018·97	1,63990·38	69
20	0,47533·44	8,92711·00	8,75964·76	1,66367·05	70
21	0,49910·12	8,91562·74	8,75913·51	1,68743·73	71
22	0,52286·79	8,90502·91	8,75865·03	1,71120·40	72
23	0,54663·46	8,89522·82	8,75819·18	1,73497·07	73
24	0,57040·13	8,88614·87	8,75775·84	1,75873·74	74
25	0,59416·80	8,87772·41	8,75734·84	1,78250·41	75
26	0,61793·48	8,86989·61	8,75696·05	1,80627·09	76
27	0,64170·15	8,86261·26	8,75659·36	1,83003·76	77
28	0,66546·82	8,85582·80	8,75624·66	1,85380·43	78
29	0,68923·49	8,84950·08	8,75591·83	1,87757·10	79
30	0,71300·17	8,84359·43	8,75560·77	1,90133·78	80
31	0,73676·84	8,83807·55	8,75531·38	1,92510·45	81
32	0,76053·51	8,83291·44	8,75503·57	1,94887·12	82
33	0,78430·18	8,82808·40	8,75477·27	1,97263·79	83
34	0,80806·85	8,82356·00	8,75452·38	1,99640·46	84
35	0,83183·53	8,81931·97	8,75428·84	2,02017·14	85
36	0,85560·20	8,81534·31	8,75406·54	2,04393·81	86
37	0,87936·87	8,81161·15	8,75385·46	2,06770·48	87
38	0,90313·54	8,80810·80	8,75365·50	2,09147·15	88
39	0,92690·22	8,80481·69	8,75346·62	2,11523·83	89
40	0,95066·89	8,80172·38	8,75328·74	2,13900·50	90
41	0,97443·56	8,79881·56	8,75311·84	2,16277·17	91
42	0,99820·23	8,79608·02	8,75295·82	2,18653·84	92
43	1,02196·90	8,79350·62	8,75280·68	2,21030·51	93
44	1,04573·58	8,79108·33	8,75266·34	2,23407·19	94
45	1,06950·25	8,78880·18	8,75252·77	2,25783·86	95
46	1,09326·92	8,78665·27	8,75239·93	2,28160·53	96
47	1,11703·59	8,78462·79	8,75227·77	2,30537·20	97
48	1,14080·27	8,78271·96	8,75216·27	2,32913·88	98
49	1,16456·94	8,78092·06	8,75205·38	2,35290·55	99
50	1,18833·61	8,77922·42	8,75195·07	2,37667·22	100
			8,75012·25		Perp.

$5\frac{3}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02428·04	0,02428·04	8,78551·08	1,23829·92	51
2	0,04856·08	9,73522·09	8,78406·54	1,26257·96	52
3	0,07284·11	9,57098·71	8,78270·30	1,28685·99	53
4	0,09712·15	9,45779·29	8,78141·86	1,31114·03	54
5	0,12140·19	9,37251·46	8,78020·75	1,33542·07	55
6	0,14568·23	9,30485·23	8,77906·53	1,35970·11	56
7	0,16996·26	9,24931·21	8,77798·80	1,38398·14	57
8	0,19424·30	9,20261·44	8,77697·18	1,40826·18	58
9	0,21852·34	9,16264·41	8,77601·30	1,43254·22	59
10	0,24280·38	9,12795·72	8,77510·82	1,45682·26	60
11	0,26708·41	9,09752·37	8,77425·45	1,48110·29	61
12	0,29136·45	9,07058·33	8,77344·86	1,50538·33	62
13	0,31564·49	9,04655·88	8,77268·80	1,52966·37	63
14	0,33992·53	9,02500·15	8,77196·99	1,55394·41	64
15	0,36420·56	9,00555·60	8,77129·19	1,57822·44	65
16	0,38848·60	8,98793·56	8,77065·18	1,60250·48	66
17	0,41276·64	8,97190·62	8,77004·74	1,62678·52	67
18	0,43704·68	8,95727·42	8,76947·66	1,65106·56	68
19	0,46132·71	8,94387·69	8,76893·75	1,67534·59	69
20	0,48560·75	8,93157·74	8,76842·84	1,69962·63	70
21	0,50988·79	8,92025·85	8,76794·75	1,72390·67	71
22	0,53416·83	8,90981·98	8,76749·32	1,74818·71	72
23	0,55844·86	8,90017·44	8,76706·41	1,77246·74	73
24	0,58272·90	8,89124·64	8,76665·86	1,79674·78	74
25	0,60700·94	8,88296·93	8,76627·57	1,82102·82	75
26	0,63128·98	8,87528·47	8,76591·37	1,84530·86	76
27	0,65557·02	8,86814·10	8,76557·18	1,86958·90	77
28	0,67985·05	8,86149·22	8,76524·86	1,89386·93	78
29	0,70413·09	8,85529·71	8,76494·34	1,91814·97	79
30	0,72841·13	8,84951·92	8,76465·49	1,94243·01	80
31	0,75269·17	8,84412·52	8,76438·23	1,96671·05	81
32	0,77697·20	8,83908·53	8,76412·47	1,99099·08	82
33	0,80125·24	8,83437·28	8,76388·11	2,01527·12	83
34	0,82553·28	8,82996·30	8,76365·10	2,03955·16	84
35	0,84981·32	8,82583·38	8,76343·35	2,06383·20	85
36	0,87409·35	8,82196·48	8,76322·79	2,08811·23	86
37	0,89837·39	8,81833·77	8,76303·36	2,11239·27	87
38	0,92265·43	8,81493·54	8,76284·98	2,13667·31	88
39	0,94693·47	8,81174·25	8,76267·63	2,16095·35	89
40	0,97121·50	8,80874·47	8,76251·21	2,18523·38	90
41	0,99549·54	8,80592·87	8,76235·70	2,20951·42	91
42	1,01977·58	8,80328·26	8,76221·04	2,23379·46	92
43	1,04405·62	8,80079·50	8,76207·18	2,25807·50	93
44	1,06833·65	8,79845·58	8,76194·08	2,28235·53	94
45	1,09261·69	8,79625·54	8,76181·68	2,30663·57	95
46	1,11689·73	8,79418·47	8,76169·97	2,33091·61	96
47	1,14117·77	8,79223·57	8,76158·89	2,35519·65	97
48	1,16545·81	8,79040·07	8,76148·42	2,37947·68	98
49	1,18973·84	8,78867·25	8,76138·53	2,40375·72	99
50	1,21401·88	8,78704·46	8,76129·17	2,42803·76	100
			8,75966·78		Perp.

$5\frac{7}{8}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02479·34	0,02479·34	8,79329·68	1,26446·46	51
2	0,04958·68	9,73598·32	8,79191·28	1,28925·80	52
3	0,07438·03	9,57199·39	8,79060·96	1,31405·14	53
4	0,09917·37	9,45903·94	8,78938·24	1,33884·49	54
5	0,12396·71	9,37399·59	8,78822·64	1,36363·83	55
6	0,14876·05	9,30656·36	8,78713·74	1,38843·17	56
7	0,17355·40	9,25124·87	8,78611·13	1,41322·51	57
8	0,19834·74	9,20477·14	8,78514·44	1,43801·86	58
9	0,22314·08	9,16501·70	8,78423·30	1,46281·20	59
10	0,24793·42	9,13054·11	8,78337·41	1,48760·54	60
11	0,27272·77	9,10031·41	8,78256·43	1,51239·88	61
12	0,29752·11	9,07357·53	8,78180·09	1,53719·22	62
13	0,32231·45	9,04974·79	8,78108·10	1,56198·57	63
14	0,34710·79	9,02838·32	8,78040·22	1,58677·91	64
15	0,37190·13	9,00912·55	8,77976·21	1,61157·25	65
16	0,39669·48	8,99168·88	8,77915·82	1,63636·59	66
17	0,42148·82	8,97583·85	8,77858·88	1,66115·94	67
18	0,44628·16	8,96138·11	8,77805·15	1,68595·28	68
19	0,47107·50	8,94815·41	8,77754·48	1,71074·62	69
20	0,49586·85	8,93602·05	8,77706·67	1,73553·96	70
21	0,52066·19	8,92486·34	8,77661·55	1,76033·31	71
22	0,54545·53	8,91458·22	8,77618·98	1,78512·65	72
23	0,57024·87	8,90509·02	8,77578·81	1,80991·99	73
24	0,59504·22	8,89631·13	8,77540·91	1,83471·33	74
25	0,61983·56	8,88817·95	8,77505·15	1,85950·67	75
26	0,64462·90	8,88063·62	8,77471·40	1,88430·02	76
27	0,66942·24	8,87362·99	8,77439·53	1,90909·36	77
28	0,69421·59	8,86711·46	8,77409·45	1,93388·70	78
29	0,71900·93	8,86104·93	8,77381·08	1,95868·04	79
30	0,74380·27	8,85539·73	8,77354·29	1,98347·39	80
31	0,76859·61	8,85012·57	8,77328·99	2,00826·73	81
32	0,79338·95	8,84520·46	8,77305·13	2,03306·07	82
33	0,81818·30	8,84060·73	8,77282·59	2,05785·41	83
34	0,84297·64	8,83630·93	8,77261·31	2,08264·76	84
35	0,86776·98	8,83228·85	8,77241·23	2,10744·10	85
36	0,89256·32	8,82852·47	8,77222·27	2,13223·44	86
37	0,91735·67	8,82499·95	8,77204·36	2,15702·78	87
38	0,94215·01	8,82169·59	8,77187·47	2,18182·13	88
39	0,96694·35	8,81859·85	8,77171·51	2,20661·47	89
40	0,99173·69	8,81569·33	8,77156·43	2,23140·81	90
41	1,01653·04	8,81296·69	8,77142·22	2,25620·15	91
42	1,04132·38	8,81040·74	8,77128·79	2,28099·49	92
43	1,06611·72	8,80800·37	8,77116·11	2,30578·84	93
44	1,09091·06	8,80574·57	8,77104·12	2,33058·18	94
45	1,11570·40	8,80362·35	8,77092·81	2,35537·52	95
46	1,14049·75	8,80162·87	8,77082·14	2,38016·86	96
47	1,16529·09	8,79975·29	8,77072·06	2,40496·21	97
48	1,19008·43	8,79798·87	8,77062·54	2,42975·55	98
49	1,21487·77	8,79632·87	8,77053·55	2,45454·89	99
50	1,23967·12	8,79476·69	8,77045·05	2,47934·23	100
			8,76900·79		Perp.

6 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
I	0,02530·59	0,02530·59	8,80098·36	1,29059·91	51
2	0,05061·17	9,73674·45	8,79965·87	1,31590·50	52
3	0,07591·76	9,57299·90	8,79841·25	1,34121·09	53
4	0,10122·35	9,46028·35	8,79723·99	1,36651·67	54
5	0,12652·93	9,37547·41	8,79613·68	1,39182·26	55
6	0,15183·52	9,30827·11	8,79509·86	1,41712·85	56
7	0,17714·11	9,25318·05	8,79412·15	1,44243·43	57
8	0,20244·69	9,20692·28	8,79320·16	1,46774·02	58
9	0,22775·28	9,16738·30	8,79233·56	1,49304·61	59
10	0,25305·87	9,13311·71	8,79152·02	1,51835·19	60
11	0,27836·45	9,10309·50	8,79075·24	1,54365·78	61
12	0,30367·04	9,07655·68	8,79002·93	1,56896·36	62
13	0,32897·62	9,05292·52	8,78934·82	1,59426·95	63
14	0,35428·21	9,03175·13	8,78870·67	1,61957·54	64
15	0,37958·80	9,01268·01	8,78810·23	1,64488·12	65
16	0,40489·38	8,99542·52	8,78753·29	1,67018·71	66
17	0,43019·97	8,97975·23	8,78699·65	1,69549·30	67
18	0,45550·56	8,96546·77	8,78649·09	1,72079·88	68
19	0,48081·14	8,95240·91	8,78601·46	1,74610·47	69
20	0,50611·73	8,94043·96	8,78556·56	1,77141·06	70
21	0,53142·32	8,92944·22	8,78514·26	1,79671·64	71
22	0,55672·90	8,91931·64	8,78474·38	1,82202·23	72
23	0,58203·49	8,90997·56	8,78436·80	1,84732·82	73
24	0,60734·08	8,90134·39	8,78401·37	1,87263·40	74
25	0,63264·66	8,89335·51	8,78367·97	1,89793·99	75
26	0,65795·25	8,88595·09	8,78336·49	1,92324·58	76
27	0,68325·84	8,87907·97	8,78306·81	1,94855·16	77
28	0,70856·42	8,87269·55	8,78278·83	1,97385·75	78
29	0,73387·01	8,86675·75	8,78252·45	1,99916·34	79
30	0,75917·60	8,86122·91	8,78227·58	2,02446·92	80
31	0,78448·18	8,85607·74	8,78204·13	2,04977·51	81
32	0,80978·77	8,85127·26	8,78182·01	2,07508·10	82
33	0,83509·36	8,84678·81	8,78161·17	2,10038·68	83
34	0,86039·94	8,84259·95	8,78141·51	2,12569·27	84
35	0,88570·53	8,83868·45	8,78122·97	2,15099·86	85
36	0,91101·12	8,83502·33	8,78105·48	2,17630·44	86
37	0,93631·70	8,83159·74	8,78088·99	2,20161·03	87
38	0,96162·29	8,82839·00	8,78073·45	2,22691·61	88
39	0,98692·87	8,82538·58	8,78058·78	2,25222·20	89
40	1,01223·46	8,82257·04	8,78044·95	2,27752·79	90
41	1,03754·05	8,81993·11	8,78031·91	2,30283·37	91
42	1,06284·63	8,81745·57	8,78019·62	2,32813·96	92
43	1,08815·22	8,81513·34	8,78008·01	2,35344·55	93
44	1,11345·81	8,81295·38	8,77997·08	2,37875·13	94
45	1,13876·39	8,81090·77	8,77986·75	2,40405·72	95
46	1,16406·98	8,80898·60	8,77977·02	2,42936·31	96
47	1,18937·57	8,80718·09	8,77967·84	2,45466·89	97
48	1,21468·15	8,80548·49	8,77959·18	2,47997·48	98
49	1,23998·74	8,80389·09	8,77951·01	2,50528·07	99
50	1,26529·33	8,80239·25	8,77943·31	2,53058·65	100
			8,77815·13		Perp.

$6\frac{1}{4}$ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02632·89	0,02632·89	8,81606·66	1,34277·59	51
2	0,05265·79	9,73826·39	8,81485·28	1,36910·48	52
3	0,07898·68	9,57500·48	8,81371·35	1,39543·38	53
4	0,10531·58	9,46276·53	8,81264·40	1,42176·27	54
5	0,13164·47	9,37842·19	8,81163·97	1,44809·16	55
6	0,15797·36	9,31167·48	8,81069·66	1,47442·06	56
7	0,18430·26	9,25703·02	8,80981·10	1,50074·95	57
8	0,21063·15	9,21120·86	8,80897·90	1,52707·84	58
9	0,23696·04	9,17209·49	8,80819·75	1,55340·74	59
10	0,26328·94	9,13824·52	8,80746·32	1,57973·63	60
11	0,28961·83	9,10862·97	8,80677·32	1,60606·53	61
12	0,31594·73	9,08248·81	8,80612·48	1,63239·42	62
13	0,34227·62	9,05924·36	8,80551·55	1,65872·31	63
14	0,36860·51	9,03844·73	8,80494·27	1,68505·21	64
15	0,39493·41	9,01974·43	8,80440·43	1,71138·10	65
16	0,42126·30	9,00284·80	8,80389·82	1,73771·00	66
17	0,44759·20	8,98752·47	8,80342·25	1,76403·89	67
18	0,47392·09	8,97358·03	8,80297·51	1,79036·78	68
19	0,50024·98	8,96085·31	8,80255·45	1,81669·68	69
20	0,52657·88	8,94920·58	8,80215·91	1,84302·57	70
21	0,55290·77	8,93852·19	8,80178·72	1,86935·46	71
22	0,57923·67	8,92870·11	8,80143·75	1,89568·36	72
23	0,60556·56	8,91965·64	8,80110·86	1,92201·25	73
24	0,63189·45	8,91131·26	8,80079·93	1,94834·15	74
25	0,65822·35	8,90360·33	8,80050·84	1,97467·04	75
26	0,68455·24	8,89647·05	8,80023·47	2,00099·93	76
27	0,71088·13	8,88986·25	8,79997·74	2,02732·83	77
28	0,73721·03	8,88373·38	8,79973·53	2,05365·72	78
29	0,76353·92	8,87804·36	8,79950·76	2,07998·62	79
30	0,78986·82	8,87275·53	8,79929·33	2,10631·51	80
31	0,81619·71	8,86783·63	8,79909·18	2,13264·40	81
32	0,84252·60	8,86325·70	8,79890·22	2,15897·30	82
33	0,86885·50	8,85899·07	8,79872·38	2,18530·19	83
34	0,89518·39	8,85501·33	8,79855·61	2,21163·09	84
35	0,92151·29	8,85130·29	8,79839·82	2,23795·98	85
36	0,94784·18	8,84783·92	8,79824·97	2,26428·87	86
37	0,97417·07	8,84460·46	8,79810·99	2,29061·77	87
38	1,00049·97	8,84158·20	8,79797·84	2,31694·66	88
39	1,02682·86	8,83875·63	8,79785·47	2,34327·55	89
40	1,05315·75	8,83611·35	8,79773·83	2,36960·45	90
41	1,07948·65	8,83364·09	8,79762·88	2,39593·34	91
42	1,10581·54	8,83132·63	8,79752·57	2,42226·24	92
43	1,13214·44	8,82915·93	8,79742·87	2,44859·13	93
44	1,15847·33	8,82712·95	8,79733·75	2,47492·02	94
45	1,18480·22	8,82522·77	8,79725·16	2,50124·92	95
46	1,21113·12	8,82344·54	8,79717·08	2,52757·81	96
47	1,23746·01	8,82177·45	8,79709·48	2,55390·71	97
48	1,26378·91	8,82020·77	8,79702·32	2,58023·60	98
49	1,29011·80	8,81873·84	8,79695·59	2,60656·49	99
50	1,31644·69	8,81736·00	8,79689·25	2,63289·39	100
			8,79588·00		Perp.

$6\frac{1}{2}$ Per Cent.

Years	Log. r".	Log. a".	Log. a".	Log. r".	Years
1	0,02734·96	0,02734·96	8,83077·22	1,39483·00	51
2	0,05469·92	9,73977·92	8,82966·09	1,42217·96	52
3	0,08204·88	9,57700·41	8,82862·00	1,44952·92	53
4	0,10939·84	9,46523·82	8,82764·50	1,47687·88	54
5	0,13674·80	9,38135·80	8,82673·15	1,50422·84	55
6	0,16409·76	9,31506·37	8,82587·53	1,53157·80	56
7	0,19144·73	9,26086·14	8,82507·31	1,55892·76	57
8	0,21879·69	9,21547·18	8,82432·11	1,58627·73	58
9	0,24614·65	9,17677·99	8,82361·62	1,61362·69	59
10	0,27349·61	9,14334·18	8,82295·53	1,64097·65	60
11	0,30084·57	9,11412·77	8,82233·58	1,66832·61	61
12	0,32819·53	9,08837·77	8,82175·48	1,69567·57	62
13	0,35554·49	9,06551·46	8,82121·00	1,72302·53	63
14	0,38289·45	9,04509·01	8,82069·90	1,75037·49	64
15	0,41024·41	9,02674·88	8,82021·99	1,77772·45	65
16	0,43759·37	9,01020·48	8,81977·04	1,80507·41	66
17	0,46494·33	8,99522·41	8,81934·88	1,83242·37	67
18	0,49229·29	8,98161·30	8,81895·33	1,85977·33	68
19	0,51964·25	8,96920·96	8,81858·22	1,88712·29	69
20	0,54699·22	8,95787·72	8,81823·41	1,91447·25	70
21	0,57434·18	8,94749·91	8,81790·75	1,94182·22	71
22	0,60169·14	8,93797·50	8,81760·10	1,96917·18	72
23	0,62904·10	8,92921·85	8,81731·35	1,99652·14	73
24	0,65639·06	8,92115·41	8,81704·36	2,02387·10	74
25	0,68374·02	8,91371·58	8,81679·04	2,05122·06	75
26	0,71108·98	8,90684·56	8,81655·27	2,07857·02	76
27	0,73843·94	8,90049·21	8,81632·98	2,10591·98	77
28	0,76578·90	8,89460·99	8,81612·05	2,13326·94	78
29	0,79313·86	8,88915·82	8,81592·41	2,16061·90	79
30	0,82048·82	8,88410·09	8,81573·97	2,18796·86	80
31	0,84783·78	8,87940·52	8,81556·67	2,21531·82	81
32	0,87518·74	8,87504·19	8,81540·43	2,24266·78	82
33	0,90253·71	8,87098·44	8,81525·19	2,27001·74	83
34	0,92988·67	8,86720·87	8,81510·88	2,29736·71	84
35	0,95723·63	8,86369·31	8,81497·44	2,32471·67	85
36	0,98458·59	8,86041·78	8,81484·84	2,35206·63	86
37	1,01193·55	8,85736·47	8,81473·01	2,37941·59	87
38	1,03928·51	8,85451·74	8,81461·89	2,40676·55	88
39	1,06663·47	8,85186·07	8,81451·47	2,43411·51	89
40	1,09398·43	8,84938·09	8,81441·67	2,46146·47	90
41	1,12133·39	8,84706·52	8,81432·48	2,48881·43	91
42	1,14868·35	8,84490·21	8,81423·86	2,51616·39	92
43	1,17603·31	8,84288·08	8,81415·75	2,54351·35	93
44	1,20338·27	8,84099·13	8,81408·16	2,57086·31	94
45	1,23073·24	8,83922·46	8,81401·02	2,59821·27	95
46	1,25808·20	8,83757·23	8,81394·32	2,62556·23	96
47	1,28543·16	8,83602·65	8,81388·02	2,65291·20	97
48	1,31278·12	8,83458·00	8,81382·12	2,68026·16	98
49	1,34013·08	8,83322·62	8,81376·57	2,70761·12	99
50	1,36748·04	8,83195·89	8,81371·36	2,73496·08	100
			8,81291·34		Perp.

$6\frac{3}{4}$ Per Cent.

Years	Log. r.	Log. a.	Log. a.	Log. r.	Years
1	0,02836·79	0,02836·79	8,84511·27	1,44676·21	51
2	0,05673·58	9,74129·03	8,84409·58	1,47513·00	52
3	0,08510·37	9,57899·71	8,84314·55	1,50349·78	53
4	0,11347·15	9,46770·23	8,84225·70	1,53186·57	54
5	0,14183·94	9,38428·23	8,84142·64	1,56023·36	55
6	0,17020·73	9,31843·76	8,84064·98	1,58860·15	56
7	0,19857·52	9,26467·41	8,83992·35	1,61696·94	57
8	0,22694·31	9,21971·27	8,83924·43	1,64533·73	58
9	0,25531·10	9,18143·83	8,83860·89	1,67370·51	59
10	0,28367·88	9,14840·71	8,83801·46	1,70207·30	60
11	0,31204·67	9,11958·96	8,83745·86	1,73044·09	61
12	0,34041·46	9,09422·58	8,83693·84	1,75880·88	62
13	0,36878·25	9,07173·86	8,83645·16	1,78717·67	63
14	0,39715·04	9,05167·97	8,83599·62	1,81554·46	64
15	0,42551·83	9,03369·43	8,83557·00	1,84391·24	65
16	0,45388·61	9,01749·60	8,83517·10	1,87228·03	66
17	0,48225·40	9,00285·12	8,83479·77	1,90064·82	67
18	0,51062·19	8,98956·65	8,83444·82	1,92901·61	68
19	0,53898·98	8,97747·98	8,83412·11	1,95738·40	69
20	0,56735·77	8,96645·47	8,83381·49	1,98575·19	70
21	0,59572·56	8,95637·47	8,83352·83	2,01411·97	71
22	0,62409·34	8,94713·96	8,83325·99	2,04248·76	72
23	0,65246·13	8,93866·31	8,83300·87	2,07085·55	73
24	0,68082·92	8,93086·99	8,83277·36	2,09922·34	74
25	0,70919·71	8,92369·42	8,83255·33	2,12759·13	75
26	0,73756·50	8,91707·81	8,83234·70	2,15595·92	76
27	0,76593·29	8,91097·05	8,83215·40	2,18432·70	77
28	0,79430·07	8,90532·59	8,83197·32	2,21269·49	78
29	0,82266·86	8,90010·40	8,83180·40	2,24106·28	79
30	0,85103·65	8,89526·87	8,83164·55	2,26943·07	80
31	0,87940·44	8,89078·74	8,83149·70	2,29779·86	81
32	0,90777·23	8,88663·09	8,83135·80	2,32616·65	82
33	0,93614·02	8,88277·31	8,83122·78	2,35453·43	83
34	0,96450·80	8,87919·00	8,83110·58	2,38290·22	84
35	0,99287·59	8,87586·01	8,83099·17	2,41127·01	85
36	1,02124·38	8,87276·38	8,83088·48	2,43963·80	86
37	1,04961·17	8,86988·30	8,83078·47	2,46800·59	87
38	1,07797·96	8,86720·17	8,83069·09	2,49637·38	88
39	1,10634·75	8,86470·49	8,83060·30	2,52474·16	89
40	1,13471·53	8,86237·90	8,83052·08	2,55310·95	90
41	1,16308·32	8,86021·12	8,83044·37	2,58147·74	91
42	1,19145·11	8,85819·04	8,83037·15	2,60984·53	92
43	1,21981·90	8,85630·58	8,83030·39	2,63821·32	93
44	1,24818·69	8,85454·78	8,83024·06	2,66658·11	94
45	1,27655·48	8,85290·74	8,83018·13	2,69494·90	95
46	1,30492·27	8,85137·63	8,83012·57	2,72331·68	96
47	1,33329·05	8,84994·69	8,83007·37	2,75168·47	97
48	1,36165·84	8,84861·21	8,83002·50	2,78005·26	98
49	1,39002·63	8,84736·54	8,82997·94	2,80842·05	99
50	1,41839·42	8,84620·09	8,82993·66	2,83678·84	100
			8,82930·38		Perp.

7 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,02938·38	0,02938·38	8,85910·02	1,49857·27	51
2	0,05876·76	9,74279·72	8,85817·02	1,52795·64	52
3	0,08815·13	9,58098·38	8,85730·29	1,55734·02	53
4	0,11753·51	9,47015·78	8,85649·39	1,58672·40	54
5	0,14691·89	9,38719·52	8,85573·91	1,61610·78	55
6	0,17630·27	9,32179·69	8,85503·50	1,64549·16	56
7	0,20568·64	9,26846·85	8,85437·79	1,67487·53	57
8	0,23507·02	9,22393·12	8,85376·47	1,70425·91	58
9	0,26445·40	9,18607·01	8,85319·24	1,73364·29	59
10	0,29383·78	9,15344·14	8,85265·82	1,76302·67	60
11	0,32322·16	9,12501·56	8,85215·96	1,79241·04	61
12	0,35260·53	9,10003·26	8,85169·41	1,82179·42	62
13	0,38198·91	9,07791·58	8,85125·95	1,85117·80	63
14	0,41137·29	9,05821·70	8,85085·37	1,88056·18	64
15	0,44075·67	9,04058·10	8,85047·48	1,90994·56	65
16	0,47014·04	9,02472·23	8,85012·11	1,93932·93	66
17	0,49952·42	9,01040·68	8,84979·07	1,96871·31	67
18	0,52890·80	8,99744·14	8,84948·21	1,99809·69	68
19	0,55829·18	8,98566·45	8,84919·39	2,02748·07	69
20	0,58767·56	8,97493·95	8,84892·48	2,05686·44	70
21	0,61705·93	8,96514·99	8,84867·34	2,08624·82	71
22	0,64644·31	8,95619·62	8,84843·87	2,11563·20	72
23	0,67582·69	8,94799·18	8,84821·93	2,14501·58	73
24	0,70521·07	8,94046·18	8,84801·44	2,17439·95	74
25	0,73459·44	8,93354·06	8,84782·30	2,20378·33	75
26	0,76397·82	8,92717·03	8,84764·42	2,23316·71	76
27	0,79336·20	8,92130·00	8,84747·72	2,26255·09	77
28	0,82274·58	8,91588·47	8,84732·11	2,29193·47	78
29	0,85212·96	8,91088·39	8,84717·54	2,32131·84	79
30	0,88151·33	8,90626·18	8,84703·91	2,35070·22	80
31	0,91089·71	8,90198·61	8,84691·19	2,38008·60	81
32	0,94028·09	8,89802·78	8,84679·30	2,40946·98	82
33	0,96966·47	8,89436·08	8,84668·19	2,43885·35	83
34	0,99904·84	8,89096·14	8,84657·81	2,46823·73	84
35	1,02843·22	8,88780·83	8,84648·11	2,49762·11	85
36	1,05781·60	8,88488·21	8,84639·05	2,52700·49	86
37	1,08719·98	8,88216·49	8,84630·58	2,55638·87	87
38	1,11658·36	8,87964·09	8,84622·67	2,58577·24	88
39	1,14596·73	8,87729·51	8,84615·28	2,61515·62	89
40	1,17535·11	8,87511·42	8,84608·37	2,64454·00	90
41	1,20473·49	8,87308·58	8,84601·92	2,67392·38	91
42	1,23411·87	8,87119·87	8,84595·88	2,70330·75	92
43	1,26350·24	8,86944·23	8,84590·25	2,73269·13	93
44	1,29288·62	8,86780·72	8,84584·98	2,76207·51	94
45	1,32227·00	8,86628·48	8,84580·06	2,79145·89	95
46	1,35165·38	8,86486·67	8,84575·46	2,82084·27	96
47	1,38103·76	8,86354·55	8,84571·15	2,85022·64	97
48	1,41042·13	8,86231·45	8,84567·14	2,87961·02	98
49	1,43980·51	8,86116·71	8,84563·40	2,90899·40	99
50	1,46918·89	8,86009·74	8,84559·88	2,93837·78	100
			8,84509·80		Perp.

7 ½ Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,03140·85	0,03140·85	8,88606·25	1,60183·17	51
2	0,06281·69	9,74579·88	8,88528·58	1,63324·01	52
3	0,09422·54	9,58493·88	8,88456·46	1,66464·86	53
4	0,12563·39	9,47504·25	8,88389·48	1,69605·71	54
5	0,15704·23	9,39298·64	8,88327·27	1,72746·55	55
6	0,18845·08	9,32847·11	8,88269·47	1,75887·40	56
7	0,21985·92	9,27600·27	8,88215·78	1,79028·25	57
8	0,25126·77	9,23230·23	8,88165·89	1,82169·09	58
9	0,28267·62	9,19525·51	8,88119·53	1,85309·94	59
10	0,31408·46	9,16341·76	8,88076·46	1,88450·79	60
11	0,34549·31	9,13576·05	8,88036·42	1,91591·63	61
12	0,37690·16	9,11152·40	8,87999·21	1,94732·48	62
13	0,40831·00	9,09013·17	8,87964·63	1,97873·32	63
14	0,43971·85	9,07113·56	8,87932·48	2,01014·17	64
15	0,47112·70	9,05418·10	8,87902·60	2,04155·02	65
16	0,50253·54	9,03898·22	8,87874·82	2,07295·86	66
17	0,53394·39	9,02530·60	8,87848·99	2,10436·71	67
18	0,56535·24	9,01295·93	8,87824·99	2,13577·56	68
19	0,59676·08	9,00178·08	8,87802·66	2,16718·40	69
20	0,62816·93	8,99163·44	8,87781·91	2,19859·25	70
21	0,65957·77	8,98240·41	8,87762·62	2,23000·10	71
22	0,69098·62	8,97399·04	8,87744·67	2,26140·94	72
23	0,72239·47	8,96630·73	8,87727·98	2,29281·79	73
24	0,75380·31	8,95928·03	8,87712·47	2,32422·64	74
25	0,78521·16	8,95284·41	8,87698·04	2,35563·48	75
26	0,81662·01	8,94694·14	8,87684·62	2,38704·33	76
27	0,84802·85	8,94152·15	8,87672·15	2,41845·17	77
28	0,87943·70	8,93653·99	8,87660·54	2,44986·02	78
29	0,91084·55	8,93195·65	8,87649·75	2,48126·87	79
30	0,94225·39	8,92773·59	8,87639·71	2,51267·71	80
31	0,97366·24	8,92384·62	8,87630·38	2,54408·56	81
32	1,00507·09	8,92025·89	8,87621·70	2,57549·41	82
33	1,03647·93	8,91694·84	8,87613·63	2,60690·25	83
34	1,06788·78	8,91389·12	8,87606·12	2,63831·10	84
35	1,09929·62	8,91106·65	8,87599·13	2,66971·95	85
36	1,13070·47	8,90845·53	8,87592·64	2,70112·79	86
37	1,16211·32	8,90604·04	8,87586·60	2,73253·64	87
38	1,19352·16	8,90380·58	8,87580·98	2,76394·49	88
39	1,22493·01	8,90173·74	8,87575·75	2,79535·33	89
40	1,25633·86	8,89982·22	8,87570·89	2,82676·18	90
41	1,28774·70	8,89804·82	8,87566·37	2,85817·02	91
42	1,31915·55	8,89640·43	8,87562·17	2,88957·87	92
43	1,35056·40	8,89488·08	8,87558·25	2,92098·72	93
44	1,38197·24	8,89346·82	8,87554·62	2,95239·56	94
45	1,41338·09	8,89215·84	8,87551·23	2,98380·41	95
46	1,44478·94	8,89094·35	8,87548·08	3,01521·26	96
47	1,47619·78	8,88981·64	8,87545·16	3,04662·10	97
48	1,50760·63	8,88877·05	8,87542·43	3,07802·95	98
49	1,53901·47	8,88779·99	8,87539·89	3,10943·80	99
50	1,57042·32	8,88689·89	8,87537·54	3,14084·64	100
			8,87506·13		Perp.

(312)

8 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a'	Log. r^n.	Years
1	0,03342·38	0,03342·38	8,91174·95	1,70461·15	51
2	0,06684·75	9,74878·43	8,91110·22	1,73803·53	52
3	0,10027·13	9,58886·92	8,91050·36	1,77145·90	53
4	0,13369·50	9,47989·30	8,90995·00	1,80488·28	54
5	0,16711·88	9,39873·22	8,90943·81	1,83830·66	55
6	0,20054·25	9,33508·74	8,90896·47	1,87173·03	56
7	0,23396·63	9,28346·49	8,90852·68	1,90515·41	57
8	0,26739·00	9,24058·61	8,90812·18	1,93857·78	58
9	0,30081·38	9,20433·63	8,90774·70	1,97200·16	59
10	0,33423·76	9,17327·22	8,90740·04	2,00542·53	60
11	0,36766·13	9,14636·48	8,90707·96	2,03884·91	61
12	0,40108·51	9,12285·46	8,90678·27	2,07227·28	62
13	0,43450·88	9,10216·54	8,90650·81	2,10569·66	63
14	0,46793·26	9,08384·95	8,90625·41	2,13912·04	64
15	0,50135·63	9,06755·27	8,90601·89	2,17254·41	65
16	0,53478·01	9,05298·95	8,90580·13	2,20596·79	66
17	0,56820·38	9,03992·72	8,90559·98	2,23939·16	67
18	0,60162·76	9,02817·29	8,90541·34	2,27281·54	68
19	0,63505·14	9,01756·60	8,90524·08	2,30623·91	69
20	0,66847·51	9,00797·05	8,90508·12	2,33966·29	70
21	0,70189·89	8,99927·09	8,90493·34	2,37308·66	71
22	0,73532·26	8,99136·82	8,90479·66	2,40651·04	72
23	0,76874·64	8,98417·69	8,90466·99	2,43993·42	73
24	0,80217·01	8,97762·28	8,90455·27	2,47335·79	74
25	0,83559·39	8,97164·12	8,90444·41	2,50678·17	75
26	0,86901·76	8,96617·52	8,90434·37	2,54020·54	76
27	0,90244·14	8,96117·47	8,90425·07	2,57362·92	77
28	0,93586·52	8,95659·53	8,90416·46	2,60705·29	78
29	0,96928·89	8,95239·79	8,90408·49	2,64047·67	79
30	1,00271·27	8,94854·71	8,90401·12	2,67390·04	80
31	1,03613·64	8,94501·18	8,90394·29	2,70732·42	81
32	1,06956·02	8,94176·38	8,90387·96	2,74074·79	82
33	1,10298·39	8,93877·80	8,90382·11	2,77417·17	83
34	1,13640·77	8,93603·14	8,90376·68	2,80759·55	84
35	1,16983·14	8,93350·38	8,90371·68	2,84101·92	85
36	1,20325·52	8,93117·65	8,90367·03	2,87444·30	86
37	1,23667·90	8,92903·25	8,90362·72	2,90786·67	87
38	1,27010·27	8,92705·68	8,90358·74	2,94129·05	88
39	1,30352·65	8,92523·54	8,90355·06	2,97471·42	89
40	1,33695·02	8,92355·57	8,90351·64	3,00813·80	90
41	1,37037·40	8,92200·62	8,90348·49	3,04156·17	91
42	1,40379·77	8,92057·63	8,90345·56	3,07498·55	92
43	1,43722·15	8,91925·67	8,90342·85	3,10840·93	93
44	1,47064·52	8,91803·83	8,90340·34	3,14183·30	94
45	1,50406·90	8,91691·32	8,90338·02	3,17525·68	95
46	1,53749·28	8,91587·40	8,90335·86	3,20868·05	96
47	1,57091·65	8,91491·41	8,90333·87	3,24210·43	97
48	1,60434·03	8,91402·71	8,90332·04	3,27552·80	98
49	1,63776·40	8,91320·74	8,90330·33	3,30895·18	99
50	1,67118·78	8,91244·98	8,90328·74	3,34237·55	100
			8,90309·00		Perp.

9 Per Cent.

Years	Log. r^a.	Log. a^a.	Log. a^a.	Log. r^{-a}.	Years
1	0,03742·65	0,03742·65	8,95963·42	1,90875·14	51
2	0,07485·30	9,75470·67	8,95918·65	1,94617·79	52
3	0,11227·95	9,59665·73	8,95877·61	1,98360·44	53
4	0,14970·60	9,48949·26	8,95840·00	2,02103·09	54
5	0,18713·25	9,41008·93	8,95805·52	2,05845·74	55
6	0,22455·90	9,34814·86	8,95773·91	2,09588·39	56
7	0,26198·55	9,29817·72	8,95744·93	2,13331·04	57
8	0,29941·20	9,25689·66	8,95718·36	2,17073·69	58
9	0,33683·85	9,22219·29	8,95694·01	2,20816·34	59
10	0,37426·50	9,19262·35	8,95671·67	2,24558·99	60
11	0,41169·15	9,16715·98	8,95651·19	2,28301·64	61
12	0,44911·80	9,14504·29	8,95632·40	2,32044·29	62
13	0,48654·45	9,12569·77	8,95615·18	2,35786·94	63
14	0,52397·10	9,10867·72	8,95599·38	2,39529·59	64
15	0,56139·75	9,09362·78	8,95584·89	2,43272·24	65
16	0,59882·40	9,08026·53	8,95571·61	2,47014·89	66
17	0,63625·05	9,06835·74	8,95559·43	2,50757·54	67
18	0,67367·70	9,05771·28	8,95548·24	2,54500·19	68
19	0,71110·35	9,04817·14	8,95537·99	2,58242·84	69
20	0,74853·00	9,03959·84	8,95528·59	2,61985·49	70
21	0,78595·65	9,03187·94	8,95519·96	2,65728·14	71
22	0,82338·30	9,02491·64	8,95512·06	2,69470·79	72
23	0,86080·95	9,01862·51	8,95504·80	2,73213·43	73
24	0,89823·60	9,01293·22	8,95498·14	2,76956·08	74
25	0,93566·24	9,00777·44	8,95492·04	2,80698·73	75
26	0,97308·89	9,00309·57	8,95486·44	2,84441·38	76
27	1,01051·54	8,99884·72	8,95481·29	2,88184·03	77
28	1,04794·19	8,99498·57	8,95476·59	2,91926·68	78
29	1,08536·84	3,99147·30	8,95472·26	2,95669·33	79
30	1,12279·49	8,98827·51	8,95468·29	2,99411·98	80
31	1,16022·14	8,98536·18	8,95464·65	3,03154·63	81
32	1,19764·79	8,98270·62	8,95461·32	3,06897·28	82
33	1,23507·44	8,98028·40	8,95458·26	3,10639·93	83
34	1,27250·09	8,97807·36	8,95455·45	3,14382·58	84
35	1,30993·74	8,97605·57	8,95452·87	3,18125·23	85
36	1,34735·39	8,97421·25	8,95450·50	3,21867·88	86
37	1,38478·04	8,97252·83	8,95448·34	3,25610·53	87
38	1,42220·69	8,97098·90	8,95446·35	3,29353·18	88
39	1,45963·34	8,96958·15	8,95444·52	3,33095·83	89
40	1,49705·99	8,96829·43	8,95442·85	3,36838·48	90
41	1,53448·64	8,96711·67	8,95441·31	3,40581·13	91
42	1,57191·29	8,96603·91	8,95439·91	3,44323·78	92
43	1,60933·94	8,96505·28	8,95438·61	3,48066·43	93
44	1,64676·59	8,96415·00	8,95437·42	3,51809·08	94
45	1,68419·24	8,96332·33	8,95436·34	3,55551·73	95
46	1,72161·89	8,96256·63	8,95435·34	3,59294·38	96
47	1,75904·54	8,96187·29	8,95434·43	3,63037·03	97
48	1,79647·19	8,96123·78	8,95433·58	3,66779·68	98
49	1,83389·84	8,96065·59	8,95432·81	3,70522·33	99
50	1,87132·49	8,96012·28	8,95432·11	3,74264·98	100
			8,95424·25		Perp.

10 Per Cent.

Years	Log. r^n.	Log a^n.	Log. a^n.	Log. r^n.	Years
1	0,04139·27	0,04139·27	9,00337·03	2,11102·69	51
2	0,08278·54	9,76056·60	9,00306·83	2,15241·96	52
3	0,12417·81	9,60435·01	9,00278·85	2,19381·23	53
4	0,16557·07	9,49895·92	9,00253·42	2,23520·50	54
5	0,20696·34	9,42127·07	9,00230·32	2,27659·77	55
6	0,24835·61	9,36098·59	9,00209·33	2,31799·04	56
7	0,28974·88	9,31261·21	9,00190·26	2,35938·31	57
8	0,33114·15	9,27287·16	9,00172·93	2,40077·57	58
9	0,37253·42	9,23965·11	9,00157·18	2,44216·84	59
10	0,41392·69	9,21150·87	9,00142·87	2,48356·11	60
11	0,45531·95	9,18741·68	9,00129·86	2,52495·38	61
12	0,49671·22	9,16661·75	9,00118·04	2,56634·65	62
13	0,53810·49	9,14853·64	9,00107·30	2,60773·92	63
14	0,57949·76	9,13272·77	9,00097·53	2,64913·19	64
15	0,62089·03	9,11883·91	9,00088·65	2,69052·45	65
16	0,66228·30	9,10658·73	9,00080·59	2,73191·72	66
17	0,70367·57	9,09574·15	9,00073·26	2,77330·99	67
18	0,74506·83	9,08611·14	9,00066·59	2,81470·26	68
19	0,78646·10	9,07753·82	9,00060·53	2,85609·53	69
20	0,82785·37	9,06988·86	9,00055·03	2,89748·80	70
21	0,86924·64	9,06304·95	9,00050·03	2,93888·06	71
22	0,91063·91	9,05692·41	9,00045·47	2,98027·33	72
23	0,95203·18	9,05142·97	9,00041·34	3,02166·60	73
24	0,99342·44	9,04649·44	9,00037·57	3,06305·87	74
25	1,03481·71	9,04205·57	9,00034·16	3,10445·14	75
26	1,07620·98	9,03805·97	9,00031·05	3,14584·41	76
27	1,11760·25	9,03445·86	9,00028·23	3,18723·68	77
28	1,15899·52	9,03121·05	9,00025·66	3,22862·94	78
29	1,20038·79	9,02827·87	9,00023·33	3,27002·21	79
30	1,24178·06	9,02563·04	9,00021·21	3,31141·48	80
31	1,28317·32	9,02323·69	9,00019·28	3,35280·75	81
32	1,32456·59	9,02107·23	9,00017·53	3,39420·02	82
33	1,36595·86	9,01911·38	9,00015·93	3,43559·29	83
34	1,40735·13	9,01734·10	9,00014·48	3,47698·56	84
35	1,44874·40	9,01573·56	9,00013·17	3,51837·82	85
36	1,49013·67	9,01428·13	9,00011·97	3,55977·09	86
37	1,53152·94	9,01296·35	9,00010·88	3,60116·36	87
38	1,57292·20	9,01176·88	9,00009·89	3,64255·63	88
39	1,61431·47	9,01068·57	9,00009·00	3,68394·90	89
40	1,65570·74	9,00970·32	9,00008·17	3,72534·17	90
41	1,69710·01	9,00881·21	9,00007·43	3,76673·43	91
42	1,73849·28	9,00800·36	9,00006·76	3,80812·70	92
43	1,77988·55	9,00726·99	9,00006·14	3,84951·97	93
44	1,82127·81	9,00660·40	9,00005·58	3,89091·24	94
45	1,86267·08	9,00599·94	9,00005·08	3,93230·51	95
46	1,90406·35	9,00545·06	9,00004·61	3,97369·78	96
47	1,94545·62	9,00495·22	9,00004·19	4,01509·05	97
48	1,98684·89	9,00449·97	9,00003·81	4,05648·31	98
49	2,02824·16	9,00408·87	9,00003·47	4,09787·58	99
50	2,06963·43	9,00371·54	9,00003·15	4,13926·85	100
			9,00000·00		Perp.

12 Per Cent.

Years	Log. r^n.	Log. a^n.	Log. a^n.	Log. r^n.	Years
1	0,04921·80	0,04921·80	9,08052·50	2,51011·92	51
2	0,09843·60	9,77210·02	9,08038·09	2,55933·72	52
3	0,14765·41	9,61945·76	9,08025·22	2,60855·52	53
4	0,19687·21	9,51750·53	9,08013·73	2,65777·32	54
5	0,24609·01	9,44312·17	9,08003·48	2,70699·12	55
6	0,29530·81	9,38600·95	9,07994·32	2,75620·93	56
7	0,34452·62	9,34067·76	9,07986·15	2,80542·73	57
8	0,39374·42	9,30384·99	9,07978·86	2,85464·53	58
9	0,44296·22	9,27341·55	9,07972·35	2,90386·33	59
10	0,49218·02	9,24793·44	9,07966·53	2,95308·14	60
11	0,54139·82	9,22638·18	9,07961·35	3,00229·94	61
12	0,59061·63	9,20800·26	9,07956·71	3,05151·74	62
13	0,63983·43	9,19222·50	9,07952·59	3,10073·54	63
14	0,68905·23	9,17860·65	9,07948·88	3,14995·35	64
15	0,73827·03	9,16679·78	9,07945·59	3,19917·15	65
16	0,78748·84	9,15651·89	9,07942·64	3,24838·95	66
17	0,83670·64	9,14754·25	9,07940·02	3,29760·75	67
18	0,88592·44	9,13968·18	9,07937·67	3,34682·55	68
19	0,93514·24	9,13278·15	9,07935·58	3,39604·36	69
20	0,98436·05	9,12671·17	9,07933·71	3,44526·16	70
21	1,03357·85	9,12136·31	9,07932·04	3,49447·96	71
22	1,08279·65	9,11664·26	9,07930·55	3,54369·76	72
23	1,13201·45	9,11247·08	9,07929·21	3,59291·57	73
24	1,18123·25	9,10877·96	9,07928·03	3,64213·37	74
25	1,23045·06	9,10551·01	9,07926·97	3,69135·17	75
26	1,27966·86	9,10261·16	9,07926·01	3,74056·97	76
27	1,32888·66	9,10003·99	9,07925·17	3,78978·77	77
28	1,37810·46	9,09775·65	9,07924·42	3,83900·58	78
29	1,42732·27	9,09572·78	9,07923·75	3,88822·38	79
30	1,47654·07	9,09392·45	9,07923·14	3,93744·18	80
31	1,52575·87	9,09232·07	9,07922·60	3,98665·98	81
32	1,57497·67	9,09089·38	9,07922·12	4,03587·79	82
33	1,62419·47	9,08962·36	9,07921·70	4,08509·59	83
34	1,67341·28	9,08849·27	9,07921·31	4,13431·39	84
35	1,72263·08	9,08748·55	9,07920·97	4,18353·19	85
36	1,77184·88	9,08658·81	9,07920·67	4,23274·99	86
37	1,82106·68	9,08578·84	9,07920·39	4,28196·80	87
38	1,87028·49	9,08507·57	9,07920·15	4,33118·60	88
39	1,91950·29	9,08444·03	9,07919·93	4,38040·40	89
40	1,96872·09	9,08387·38	9,07919·74	4,42962·20	90
41	2,01793·89	9,08336·86	9,07919·57	4,47884·01	91
42	2,06715·70	9,08291·80	9,07919·41	4,52805·81	92
43	2,11637·50	9,08251·61	9,07919·27	4,57727·61	93
44	2,16559·30	9,08215·76	9,07919·15	4,62649·41	94
45	2,21481·10	9,08183·77	9,07919·04	4,67571·22	95
46	2,26402·90	9,08155·23	9,07918·94	4,72493·02	96
47	2,31324·71	9,08129·76	9,07918·86	4,77414·82	97
48	2,36246·51	9,08107·04	9,07918·78	4,82336·62	98
49	2,41168·31	9,08086·76	9,07918·71	4,87258·42	99
50	2,46090·11	9,08068·66	9,07918·65	4,92180·23	100
			9,07918·12		Perp.

TABLE II.

SHOWING

A. For every rate contained in the preceding table the logarithms, to 10 and 7 decimals,
    of t, t being the interest of £1 per annum or the rate ;
    of r, r being £1 increased by interest for one year ; and the logarithm of $\log^2 r$.

B. For every rate between 0 and 10 per cent., proceeding by 10ths, the logarithms of t and r.

C. For every fractionary rate between 0 and 10 per cent., proceeding by 12ths, the logarithms of t and r.

The rate of interest which M. Thoman calls t is in modern notation denoted by i, and the amount of 1 in 1 period is now expressed by $1 + i$ instead of by r.

Table II   This table shews the Logarithms of (t), (r), and $(Log^2.r)$, t being the rate of interest per cent. and r £1 increased by its interest for one year.

Rate per Cent.	Log. t.	Log. r.	Log². r.	Rate per Cent.
¹/₂	7,69897·00043	0,00216·60618	7,33567·08	¹/₂
1	8,00000·00000	0,00432·13738	7,63562·18	1
1 ¹/₂	8,17609·12591	0,00646·60422	7,81063·85	1 ¹/₂
1 ⁵/₈	8,21085·33653	0,00760·05586	7,84513·27	1 ⁵/₈
1 ³/₄	8,24303·80487	0,00753·44179	7,87704·97	1 ³/₄
1 ⁷/₈	8,27300·12721	0,00806·76217	7,90674·55	1 ⁷/₈
2	8,30102·99957	0,00860·01718	7,93450·71	2
2 ¹/₈	8,32735·89344	0,00913·26695	7,96056·92	2 ¹/₈
2 ¹/₄	8,35218·25181	0,00966·33167	7,98512·62	2 ¹/₄
2 ³/₈	8,37566·36140	0,01019·39148	8,00834·10	2 ³/₈
2 ¹/₂	8,39794·00087	0,01072·38654	8,03035·14	2 ¹/₂
2 ⁵/₈	8,41912·93077	0,01125·31701	8,05127·49	2 ⁵/₈
2 ³/₄	8,43933·26938	0,01178·18305	8,07121·28	2 ³/₄
2 ⁷/₈	8,45863·78490	0,01230·98482	8,09025·27	2 ⁷/₈
3	8,47712·12547	0,01283·72247	8,10847·11	3
3 ¹/₈	8,49485·00217	0,01336·39616	8,12593·52	3 ¹/₈
3 ¹/₄	8,51188·33610	0,01389·00603	8,14270·41	3 ¹/₄
3 ³/₈	8,52827·37772	0,01441·55226	8,15883·04	3 ³/₈
3 ¹/₂	8,54406·80444	0,01494·03498	8,17436·08	3 ¹/₂
3 ⁵/₈	8,55930·80109	0,01546·45436	8,18933·71	3 ⁵/₈
3 ³/₄	8,57403·12677	0,01598·81054	8,20379·70	3 ³/₄
3 ⁷/₈	8,58827·17068	0,01651·10368	8,21777·43	3 ⁷/₈
4	8,60205·99913	0,01703·33393	8,23129·98	4
4 ¹/₈	8,61542·39529	0,01755·50144	8,24440·12	4 ¹/₈
4 ¹/₄	8,62838·89301	0,01807·60636	8,25710·39	4 ¹/₄
4 ³/₈	8,64097·80574	0,01859·64885	8,26943·10	4 ³/₈
4 ¹/₂	8,65321·25138	0,01911·62904	8,28140·36	4 ¹/₂
4 ⁵/₈	8,66511·17371	0,01963·54710	8,29304·13	4 ⁵/₈
4 ³/₄	8,67669·36096	0,02015·40316	8,30436·19	4 ³/₄
4 ⁷/₈	8,68797·46200	0,02067·19738	8,31538·19	4 ⁷/₈
5	8,69897·00043	0,02118·92991	8,32611·66	5
5 ¹/₈	8,70969·38697	0,02170·60088	8,33658·00	5 ¹/₈
5 ¹/₄	8,72015·93034	0,02222·21045	8,34678·52	5 ¹/₄
5 ³/₈	8,73037·84686	0,02273·75876	8,35674·44	5 ³/₈
5 ¹/₂	8,74036·26895	0,02325·24596	8,36646·89	5 ¹/₂
5 ⁵/₈	8,75012·25268	0,02376·67220	8,37596·93	5 ⁵/₈
5 ³/₄	8,75966·78447	0,02428·03760	8,38525·54	5 ³/₄
5 ⁷/₈	8,76900·78709	0,02479·34233	8,39433·65	5 ⁷/₈
·6	8,77815·12504	0,02530·58653	8,40322·12	6
6 ¹/₄	8,79588·00173	0,02632·89387	8,42043·34	6 ¹/₄
6 ¹/₂	8,81291·33566	0,02734·96078	8,43695·11	6 ¹/₂
6 ³/₄	8,82930·37728	0,02836·78837	8,45282·69	6 ³/₄
7	8,84509·80400	0,02938·37777	8,46810·76	7
7 ¹/₂	8,87506·12634	0,03140·84643	8,49704·67	7 ¹/₂
8	8,90308·99870	0,03342·37555	8,52405·52	8
9	8,95424·25094	0,03742·64979	8,57317·92	9
10	9,00000·00000	0,04139·26852	8,61692·36	10
12	9,07918·12460	0,04921·80227	8,69212·42	12

Table II   This table shews the Logarithms of *t* and *r*, *t* being the rate of interest per cent. and *r* being £1 increased by its interest for one year.

Rate per Cent.	Log. *r*	Log. *t*	Log. *t*	Log. *r*	Rate per Cent.
1/10	0,00043·40775	7,00000·00	8,70757·02	0,02160·27160	5 1/10
2/10	0,00086·77215	7,30103·00	8,71600·33	0,02201·57398	5 2/10
3/10	0,00130·09330	7,47712·13	8,72427·59	0,02242·83712	5 3/10
4/10	0,00173·37128	7,60206·00	8,73239·38	0,02284·06109	5 4/10
5/10	0,00216·60618	7,69897·00	8,74036·27	0,02325·24596	5 5/10
6/10	0,00259·79807	7,77815·13	8,74818·80	0,02366·39182	5 6/10
7/10	0,00302·94706	7,84509·80	8,75587·49	0,02407·49873	5 7/10
8/10	0,00346·05321	7,90309·00	8,76342·80	0,02448·56677	5 8/10
9/10	0,00389·11662	7,95424·25	8,77085·20	0,02489·59601	5 9/10
1	0,00432·13738	8,00000·00	8,77815·13	0,02530·58653	6
1 1/10	0,00475·11556	8,04139·27	8,78532·98	0,02571·53839	6 1/10
1 2/10	0,00518·05125	8,07918·12	8,79239·17	0,02612·45167	6 2/10
1 3/10	0,00560·94454	8,11394·34	8,79934·05	0,02653·32645	6 3/10
1 4/10	0,00603·79550	8,14612·80	8,80618·00	0,02694·16280	6 4/10
1 5/10	0,00646·60422	8,17609·13	8,81291·34	0,02734·96078	6 5/10
1 6/10	0,00689·37079	8,20412·00	8,81954·39	0,02775·72047	6 6/10
1 7/10	0,00732·09529	8,23044·89	8,82607·48	0,02816·44194	6 7/10
1 8/10	0,00774·77780	8,25527·25	8,83250·89	0,02857·12527	6 8/10
1 9/10	0,00817·41840	8,27875·36	8,83884·91	0,02897·77052	6 9/10
2	0,00860·01718	8,30103·00	8,84509·80	0,02938·37777	7
2 1/10	0,00902·57421	8,32221·93	8,85125·83	0,02978·94708	7 1/10
2 2/10	0,00945·08958	8,34242·27	8,85733·25	0,03019·47854	7 2/10
2 3/10	0,00987·56337	8,36172·78	8,86332·29	0,03059·97220	7 3/10
2 4/10	0,01029·99566	8,38021·12	8,86923·17	0,03100·42814	7 4/10
2 5/10	0,01072·38654	8,39794·00	8,87506·13	0,03140·84643	7 5/10
2 6/10	0,01114·73608	8,41497·33	8,88081·36	0,03181·22713	7 6/10
2 7/10	0,01157·04436	8,43136·38	8,88649·07	0,03221·57033	7 7/10
2 8/10	0,01199·31147	8,44715·80	8,89209·46	0,03261·87609	7 8/10
2 9/10	0,01241·53748	8,46239·80	8,89762·71	0,03302·14447	7 9/10
3	0,01283·72247	8,47712·13	8,90309·00	0,03342·37555	8
3 1/10	0,01325·86653	8,49136·17	8,90848·50	0,03382·56940	8 1/10
3 2/10	0,01367·96973	8,50515·00	8,91381·39	0,03422·72608	8 2/10
3 3/10	0,01410·03215	8,51851·39	8,91907·81	0,03462·84566	8 3/10
3 4/10	0,01452·05388	8,53147·89	8,92427·93	0,03502·92822	8 4/10
3 5/10	0,01494·03498	8,54406·80	8,92941·89	0,03542·97382	8 5/10
3 6/10	0,01535·97554	8,55630·25	8,93449·85	0,03582·98253	8 6/10
3 7/10	0,01577·87564	8,56820·17	8,93951·93	0,03622·95441	8 7/10
3 8/10	0,01619·73535	8,57978·36	8,94448·27	0,03662·88954	8 8/10
3 9/10	0,01661·55476	8,59106·46	8,94939·00	0,03702·78798	8 9/10
4	0,01703·33393	8,60206·00	8,95424·25	0,03742·64979	9
4 1/10	0,01745·07295	8,61278·39	8,95904·14	0,03782·47506	9 1/10
4 2/10	0,01786·77190	8,62324·93	8,96378·78	0,03822·26384	9 2/10
4 3/10	0,01828·43084	8,63346·85	8,96848·29	0,03862·01619	9 3/10
4 4/10	0,01870·04987	8,64345·27	8,97312·79	0,03901·73220	9 4/10
4 5/10	0,01911·62904	8,65321·25	8,97772·36	0,03941·41192	9 5/10
4 6/10	0,01953·16845	8,66275·78	8,98227·12	0,03981·05541	9 6/10
4 7/10	0,01994·66817	8,67209·79	8,98677·17	0,04020·66276	9 7/10
4 8/10	0,02036·12826	8,68124·12	8,99122·61	0,04060·23401	9 8/10
4 9/10	0,02077·54882	8,69019·61	8,99563·52	0,04099·76924	9 9/10
5	0,02118·92991	8,69897·00	9,00000·00	0,04139·26852	10

Table II This table shews the Logarithms of t and r, t being the rate of interest per cent. and r being £1 increased by its interest for one year.

Rate per Cent.	Log. r.	Log. t.	Log. t.	Log. r.	Rate per Cent.
1/12	0,00036·17614	6,92081·88	8,70614·86	0,02153·38405	5 1/12
1/6	0,00072·32216	7,22184·87	8,71321·04	0,02187·81089	5 1/6
1/3	0,00144·52409	7,52287·87	8,72699·87	0,02256·58279	5 1/3
5/12	0,00180·58009	7,61978·88	8,73373·21	0,02290·92795	5 5/12
7/12	0,00252·60240	7,76591·68	8,74689·36	0,02359·53688	5 7/12
2/3	0,00288·56882	7,82390·87	8,75332·77	0,02393·80075	5 2/3
5/6	0,00360·41243	7,92081·88	8,76591·68	0,02462·24749	5 5/6
11/12	0,00396·28971	7,96221·14	8,77207·71	0,02496·43045	5 11/12
1 1/12	0,00467·95548	8,03476·21	8,78414·16	0,02564·71576	6 1/12
1 1/6	0,00503·74407	8,06694·68	8,79005·05	0,02598·81820	6 1/6
1 1/3	0,00575·23289	8,12493·87	8,80163·23	0,02666·94283	6 1/3
1 5/12	0,00610·93322	8,15126·77	8,80730·95	0,02700·96512	6 5/12
1 7/12	0,00682·24596	8,19957·24	8,81844·58	0,02768·92984	6 7/12
1 2/3	0,00717·85846	8,22184·87	8,82390·87	0,02802·87236	6 2/3
1 5/6	0,00788·99599	8,26324·14	8,83463·26	0,02870·67791	6 5/6
1 11/12	0,00824·52110	8,28254·66	8,83989·68	0,02904·54103	6 11/12
2 1/12	0,00895·48427	8,31875·88	8,85023·77	0,02972·18816	7 1/12
2 1/6	0,00930·92241	8,33579·21	8,85531·72	0,03005·97225	7 1/6
2 1/3	0,01001·71208	8,36797·68	8,86530·14	0,03073·46170	7 1/3
2 5/12	0,01037·06368	8,38321·68	8,87020·88	0,03107·16713	7 5/12
2 7/12	0,01107·68009	8,41218·04	8,87986·01	0,03174·49962	7 7/12
2 2/3	0,01142·94618	8,42596·87	8,88460·66	0,03208·12676	7 2/3
2 5/6	0,01213·39136	8,45229·77	8,89394·66	0,03275·30303	7 5/6
2 11/12	0,01248·57115	8,46488·68	8,89854·24	0,03308·85224	7 11/12
3 1/12	0,01318·84536	8,48902·05	8,90759·05	0,03375·87300	8 1/12
3 1/6	0,01353·93986	8,50060·24	8,91204·48	0,03409·34464	8 1/6
3 1/3	0,01424·04391	8,52287·87	8,92081·88	0,03476·21063	8 1/3
3 5/12	0,01459·05355	8,53360·26	8,92514·01	0,03509·60505	8 5/12
3 7/12	0,01528·98826	8,55428·72	8,93365·60	0,03576·31697	8 7/12
3 2/3	0,01563·91343	8,56427·14	8,93785·21	0,03609·63453	8 2/3
3 5/6	0,01633·67963	8,58357·66	8,94612·46	0,03676·19309	8 5/6
3 11/12	0,01668·52074	8,59291·66	8,95020·25	0,03709·43415	8 11/12
4 1/12	0,01738·11923	8,61101·48	8,95824·53	0,03775·84005	9 1/12
4 1/6	0,01772·87670	8,61978·88	8,96221·14	0,03809·00496	9 1/6
4 1/3	0,01842·30828	8,63682·21	8,97003·68	0,03875·25890	9 1/3
4 5/12	0,01876·98249	8,64509·46	8,97389·72	0,03908·34800	9 5/12
4 7/12	0,01946·24798	8,66118·14	8,98151·66	0,03974·45068	9 7/12
4 2/3	0,01980·83934	8,66900·68	8,98527·67	0,04007·46432	9 2/3
4 5/6	0,02049·93951	8,68424·67	8,99270·08	0,04073·41642	9 5/6
4 11/12	0,02084·44841	8,69167·08	8,99636·57	0,04106·35495	9 11/12